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No. 8587

IN THE

SUPREME COURT

OF THE

STATE OF CALIFORNIA.

CHARLES LUX ET AL.,

Appellants,

vs.

JAMES B. HAGGIN ET AL.,

Respondents.

TRANSCRIPT ON APPEAL.

Volume 2.

STETSON & HOUGHTON,
Attorneys for Appellants.

LOUIS T. HAGGIN,
Attorney for Respondents.

Filed Aug 22 *1882.*

F. M. Gross *Clerk,*

By O. Barlan *Deputy.*

PLAINTIFFS' CASE IN CHIEF.

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In the Superior Court of the County of Kern, State of California.

1 CHARLES LUX AND AL.

v.

JAMES B. HAGGIN AND AL.

Plaintiffs' Bill of Exceptions on Appeal, and also on Motion for a New Trial.

2

This case came regularly on for trial before the Court sitting without a jury, a jury having been expressly waived by the parties hereto ; Hall McAllister, Edward Gray Stetson and R. E. Houghton appearing as counsel for plaintiffs, and John Garber, George Flournoy and Louis T. Haggin appearing for the defendant, the Kern River Land and Canal Company, and thereupon the following proceedings were had:

3 The plaintiffs, to establish the allegations of their amended complaint, offered and read in evidence a power of attorney from

Thomas Baker
to
Horatio P. Livermore,

dated and acknowledged December 29, 1868, and recorded January 7, 1869, in Book 1 of Powers of Attorney, page 28.

Defendant objects to the introduction of this power of attorney upon the ground that there is no title shown in the party making the power of attorney, or executing

4 it; that the testimony is irrelevant because it tends to prove no allegation of the complaint; and that the power of attorney is not sufficient to authorize the conveyance of any particular piece of land, describes no particular land, and is too vague and indefinite to authorize the conveyance of any particular piece of land.

The objection is overruled, and defendant excepts.

The power of attorney is then read in evidence, and is in the words and figures following, to wit.:

U. S. Int Rev. Stamps—
One Dollar—Cancelled.

5 " Know all men by these presents, That I, Thomas
" Baker, of Kern County, California, have made, con-
" stituted and appointed, and by these presents do
" make, constitute and appoint Horatio P. Livermore,
" of San Francisco, State of California, my true and
" lawful attorney, for me and in my name, place and
" stead, and for my use and benefit, to ask, demand,
" sue for, recover and receive all sums of money, debts
" and demands whatsoever, which are now due and
" owing, or which shall hereafter become due, owing
" or demandable to me, and have, use and take all law-
" ful ways and means in my name or otherwise for
6 " the recovery thereof by attachments, arrests, distress
" or otherwise, and to compromise and agree for the
" same, and acquittances or other sufficient discharges
" for the same, for me and in my name to make, seal
" and deliver, to receive legacies and bequests, to col-
" lect rents, dividends or annuities due or to grow due,
" to bargain, contract, agree for, purchase, receive and
" take lands, tenements and hereditaments, and ac-
" cept the seizin and possession of all lands and all
" deeds and other assurances in the law therefor, and
" to lease, let, demise, bargain, sell, remise, release,
" convey, mortgage and hypothecate lands, tenements
7 " and hereditaments, upon such terms and conditions,
" and under such covenants, as he shall think fit: Also
" to bargain and agree for, buy, sell, mortgage, hy-
" pothecate, and in any and every way and manner
" deal in and with goods, wares and merchandise,
" choses in action and other property, in possession
" or in action, and to make, do and transact all and
" every kind of business, of what nature or kind soever,
" and also for me and in my name to make and ac-
" knowledge such deeds, covenants, indentures, char-
" ter parties, bills of lading, bills, bonds, notes, re-
" ceipts, evidences of debts, releases and satisfactions

8 " of mortgages, judgments and other debts, and other
" instruments in writing of whatsoever kind and na-
" ture; all other attorneys, one or more, in my place
" and stead, or under me to make, constitute and ap-
" point, and the same at his pleasure to annul, remove
" and revoke.

" Giving and granting unto him, the said attorney,
" full power to do and perform all and every act and
" thing whatsoever requisite and necessary to be done
" in and about the premises, as fully to all intents and
" purposes as I might or could do if personally pres-
" ent, with full power of substitution and revocation,
9 " hereby ratifying and confirming all that my said
" attorney, or his substitute, shall lawfully do, or
" cause to be done, by virtue hereof. In witness
" whereof I have hereunto set my hand and seal, the
" 29th day of December, one thousand eight hundred
" and sixty-eight.

" THOMAS BAKER. [SEAL.] "

[Duly acknowledged.]

Endorsed: A full, true and correct copy of the original, recorded at request of Julius Chester, January 7th, A.D. 1869, at 11 o'clock A.M.

10 H. D. BEQUETTE, Recorder.

The plaintiffs then offered and read in evidence a power of attorney from

Julius Chester
to
Horatio P. Livermore,

dated and acknowledged on the 12th day of December, 1868, and recorded January 7th, 1869, in Book 1 of Powers of Attorney, page 30.

Defendant makes the same objection to the intro-
11 duction of this power of attorney which it made to the introduction of the first power of attorney.

The objection is overruled and defendant excepts.

The power of attorney is then read in evidence, and is in the words and figures following, to wit:

[U. S. Int. Rev. Stamps—
One Dollar—Cancelled.]

" Know all men by these presents: That I, Julius
" Chester, of Kern County, State of California, have
" made, constituted and appointed, and by these pres-
" ents do make, constitute and appoint, Horatio P.
" Livermore, of San Francisco, State of California, my

12 " true and lawful attorney, to act for me and in my
" name, place and stead, to remise, release and quit-
" claim, by good and sufficient deed, all my right, title
" and interest in and to the swamp and overflowed
" lands, lying and being in Kern County, State of
" California, and more particularly described in the
" patent issued by the State of California to W. F.
" Montgomery and others, and recorded in the Re-
" corder's office of Kern County, to receive all mon-
" eys accruing to me from such sale or sales, and in
" my name to receipt for the same.

13 " Giving and granting unto my said attorney full
" power and authority to do and perform all and every
" act and thing whatsoever requisite and necessary to
" be done in and about the premises, as fully to all
" intents and purposes as I might or could do if per-
" sonally present, with full power of substitution and
" revocation, hereby ratifying and confirming all that
" my said attorney or his substitute shall lawfully do
" or cause to be done by virtue hereof.

" In witness whereof, I have hereunto set my hand
" and seal, at the City of San Francisco, on the 12th
" day of December, one thousand eight hundred and
14 " sixty-eight.

" JULIUS CHESTER. [SEAL.]"

(Duly acknowledged.)

Endorsed: A full, true and correct copy of the original, recorded at request of Julius Chester, January 7th, A.D. 1869, at 50 min. past 11 A.M.

H. D. BEQUETTE, Recorder.

The plaintiffs then offered and read in evidence a power of attorney from

15 John H. Redington
to
Horatio P. Livermore,

dated and acknowledged on May 21, 1870, and recorded June 3, 1870.

Defendant makes the same objection to the introduction of this power of attorney which it made to the introduction of the first power of attorney.

The objection is overruled, and defendant excepts.

The power of attorney is then read in evidence, and is in the words and figures following :

16 [U. S. Int Rev. Stamp, $1—Cancelled.]

"Know all men by these presents: That I, John H. "Redington, of the City and County of San Francisco "and State of California, have made, constituted and "appointed, and by these presents do make, constitute "and appoint Horatio P. Livermore, of San Fran- "cisco, aforesaid, my true and lawful attorney, to act "for me and in my name, place and stead, in the man- "agement of my interest in certain swamp and over- "flowed lands, situated in Kern County, California, "owned in common and undivided between Julius "Chester, Thomas Baker, Horatio P. Livermore and
17 "myself, here authorizing the said H. P. Livermore to "let or lease any portion of my interest in said land, "and to sign my name as lessee of same with the "other owners aforesaid, to remise, release and con- "vey by quit claim deed my interest in any portion of "said lands with the other parties aforesaid; to make "all disbursements necessary for the management of "said lands, to receive all moneys accruing to me from "rent or sale of said lands, and to sue for and defend "my interest in the same in any court of law. Giv- "ing and granting unto my said attorney full power
18 "and authority to do and perform all and every act "and thing whatsoever requisite and necessary to be "done in and about the premises, as fully, to all in- "tents and purposes, as I might, or could do, if per- "sonally present; with full power of substitution and "revocation, hereby ratifying and confirming all that "my said attorney, or his substitute, shall lawfully "do or cause to be done by virtue hereof.

"In witness whereof, I have hereunto set my hand "and seal, at the City of San Francisco, on the twenty- "first day of May, one thousand, eight hundred and "seventy.

19 "JOHN. H. REDINGTON. [SEAL.]"

(Duly acknowledged.)

Endorsed: A full, true and correct copy of the original recorded at request of B. Brundage, June 3d, 1870, at 3 o'clock, P. M.

T. J. WILLIAMS, Recorder.
By A. A. BERMUDEZ, Deputy.

The plaintiffs then offered and read in evidence a patent from the

20 State of California
to
Henry Miller, Charles Lux and James C. Crocker, dated January 18th, 1876.

Defendant objects to the introduction of this patent as incompetent, irrelevant, and not tending to prove the issues herein, and that there is no proof of title in the grantor, or that the conditions prescribed by law have ever been complied with, or that it has any authority in law.

The objection is overruled, and defendant excepts.

The patent is then read in evidence, and is in the
21 words and figures following, to wit.:

" UNITED STATES OF AMERICA, }
" State of California, }

" To all to whom these presents shall come, greeting:
" Whereas, Under the provisions of an Act of Con-
" gress of the United States, approved the twenty-
" eighth day of September, A.D. one thousand eight
" hundred and fifty, entitled 'An Act to enable
" 'the State of Arkansas and other States to
" 'reclaim swamp land within their limits,' in
" which Act the manner of selecting and setting
22 " apart swamp and overflowed lands is fully set forth:
" And, whereas, the Legislature of the State of Cali-
" fornia has provided for the sale and conveyance of
" said lands by statutes enacted from time to time:
" And, whereas, it appears by the certificate of the
" Register of the State Land Office, Number 2041,
" bearing date January fifteenth, A.D. one thousand
" eight hundred and seventy-six, and issued in ac-
" cordance with the provisions of law, that the tracts
" of swamp and overflowed lands hereinafter described
" have been duly and properly surveyed in accordance
" with law; that full payment has been made to the
23 " State for the same, and that Henry Miller, Charles
" Lux and Jas. C. Crocker, assignees, are entitled to
" receive a patent therefor; said lands being situated
" in Kern County, and described as follows, to wit.:
" Surveys Nos. 233, 234, 235, 236, Swamp and Over-
" flowed Lands, Kern County, Townships Nos. 25 and
" and 26 South, Ranges Nos. 21 and 22 East, Mount
" Diablo meridian.

" Sections Nos. 5, 10, 11, 12, 13, 14, 24, 25 and 36,
" and portions of Secs. 4, 6, 8, 9, 15, 22, 23, 26 and 35,
" in Tp. 25 S., R. 21 E.

24 " Sections 24, 31, 32, 33 and 34, and portions of
" Secs. 25 and 26, in Tp. 25 S., R. 22 E.
" Portions of Secs. 1, 2, 12, 13, 24 and 25, in Tp.
" 26 S., R. 21 E.
" Sections 4, 5, 6, 7, 8, 15, 16, 17, 18, 19, 20, 21,
" 22, 29, 30 and 32, and portions of Sections 3, 9, 10,
" 11, 13, 14, 23, 24, 27, 28, 31 and 33, Tp. 26 S., R.
" 22 E., and more particularly described as follows :
" All of Sections Five (5), Ten (10), Eleven (11),
" Twelve (12), Thirteen (13), Fourteen (14), Twenty-
" four (24), Twenty-five (25), and Thirty-six (36),
" Northeast quarter, North half of Northwest quarter,
25 " Southeast quarter of Northwest quarter, North half
" of Southeast quarter and Southeast quarter of South-
" east quarter of Section Six (6); South half of Section
" Four (4), North half of Northeast qr. and Northeast
" quarter of Northwest qr. of Section Eight (8);
" North half, North half of Southeast qr., Southeast
" qr. of Southeast quarter, and Northeast qr. of South-
" west qr. of Section Nine (9); Northeast qr. North
" half of Northwest qr. Southeast qr. of Northwest
" qr., North half of Southeast qr. and Southeast qr. of
" Southeast qr. of Section Fifteen (15); Northeast qr.
" of Northeast qr. of Section Twenty-two (22); North
26 " half, Southeast qr., North half of Southwest qr., and
" Southeast qr. of Southwest qr. of Section Twenty-
" three (23); Northeast qr. of Northwest qr. and East
" half of Section Twenty-six (26); East half of South-
" west qr. and East half of Section Thirty-five (35),
" Township Twenty-five (25) South, Range Twenty-
" one (21) East.
" Sections 24, 31, 32, 33 and 34; North half, South-
" east qr., and Northeast qr. of Southwest qr. of Sec.
" 25; North half, Southwest qr., and Northwest qr. of
" Southeast qr. of Sec. 26, T. 25 S. R. 22 E.
" East half, North half of Northwest qr., and South-
27 " east qr. of Northwest qr. of Sec. one (1); North half
" of Northeast qr., Southwest qr. of Northeast qr.,
" and Northeast qr. of Northwest qr. of Sec. two (2);
" East half and Southwest qr. of Sec. twelve (12);
" East half, and East half of West half of Sec. thir-
" teen (13); East half of Sec. twenty-four (24); East
" half of East half of Sec. twenty-five (25) T. 26 S. R.
" 21 E.
" Sections 4, 5, 6, 7, 8, 15, 16, 17, 18, 19, 20, 21,
" 22, 29, 30, and 32, East half, Northwest qr.,
" North half of Southwest qr., and Southeast qr. of

28 " Southwest qr. of Sec. 31; Southwest qr. of South-
" east qr., and West half of Sec. 33; West half, North
" half of Northeast qr., and Southwest qr. of North-
" east qr. of Sec. 28; Northwest qr., North half of
" Northeast qr., Southwest qr. of Northeast qr., and
" Northwest qr. of Southwest qr. of Sec. 23; North-
" west qr. of Northwest qr. of Sec. 24; Southwest qr.,
" and Southwest qr. of Northwest qr. of Sec. 13; West
" half, Southeast qr., West half of Northeast qr., and
" Southeast qr. of Northeast qr. of Section 14; North
" half, North half of Southwest qr., and Southwest qr.
" of Southwest qr. of Section nine (9); Northwest qr.
29 " and Northwest qr. of Northeast qr. of Sec. ten (10);
" Southeast qr. of Southwest qr. of Sec. eleven (11);
" West half, West half of East half, and Northeast qr.
" of Northeast qr. of Sec. three (3); Northwest qr. of
" Northwest qr. of Sec. twenty-seven (27) in township
" twenty-six (26), South, Range, twenty-two (22) East.
" All of Mt. Diablo Meridian, and containing twenty-
" nine thousand, one hundred and eighty $\frac{88}{100}$ (29,180 $\frac{88}{100}$)
" acres.

" Now, therefore, all the requirements of the Act of
" Congress, as well as the Acts of the State Legisla-
" ture, in relation to Swamp and Overflowed Lands,
30 " having been fully complied with, I, William Irwin,
" Governor of the State of California, by virtue of
" authority in me vested, have granted, bargained,
" sold and conveyed, and by these presents do grant,
" bargain, sell and convey unto Henry Miller, Charles
" Lux and James C. Crocker, all the above described
" lands, with the appurtenances thereunto belonging,
" to have and to hold, unto them, the said Henry Mil-
" ler, Charles Lux and Jas. C. Crocker, their heirs and
" assigns forever.

" In testimony whereof, I, William Irwin, Governor
" of the State of California, have caused these letters
31 " to be made patent, and the seal of the State of Cal-
" ifornia to be hereunto affixed.

" Given under my hand, at the City of Sacramento,
" this, the eighteenth day of January, in the year of
" our Lord one thousand eight hundred and seventy-
" six.

WILLIAM IRWIN,
Governor of State.

" Attest:
[Great Seal of State.]

THOMAS BECK,
Secretary of State.

32 "Countersigned."

[Seal of Land Office] WM. MINIS,
Register of State Land Office.

"Endorsed: Recorded at request of Wells, Fargo "& Co. January 25th, A. D. 1876, at 30 minutes past "10 o'clock A. M. in Book Volume 1, of Land Patents, "Records of Kern County, pages 299,, 300.

[Seal of Recorder] F. W. CRAIG,
Recorder.

The plaintiffs then offered and read in evidence a
33 Patent from the

State of California
to
Henry Miller and Charles Lux,

dated February 17, 1876.

Defendant makes the same objection to the introduction of this Patent which it made to the introduction of the first Patent.

The objection is overruled and defendant excepts. The Patent is then read in evidence and is in the words and figures following, to-wit:

34 UNITED STATES OF AMERICA, }
State of California. }

"To all to whom these presents shall come—Greeting.

"Whereas, under the provisions of an Act of Con- "gress of the United States, approved the twenty-eighth "day of September, A.D. One thousand, eight hundred "and fifty, entitled 'An Act to enable the State of "Arkansas and other States to reclaim' swamp lands "within their limits, in which Act the manner of select- "ing and setting apart swamp and overflowed lands is "fully set forth, and whereas, the Legislature of the
35 "State of California has provided for the sale and con- "veyance of said lands by Statutes enacted from time "to time, and whereas, it appears by the certificate of "the Register of the State Land Office, Number 2059, "bearing date February 7th, A D .One thousand, eight "hundred and seventy-six, and issued in accordance "with the provisions of law, that the tracts of swamp and "overflowed lands hereinafter described have been duly "and properly surveyed in accordance with law; that "full payment has been made to the State for the same, "and that Henry Miller and Charles Lux, assignees of "Duncan Beaumont are entitled to receive a Patent

36 " therefor; said lands being situated in Kern County
" and described as follows, to-wit: Surveys Nos. 294,
" 295, 296, swamp and overflowed lands, Kern County,
" Township No. 25 south, Range No. 21 east, Mount
" Diablo Meridan. Sections Nos. 8, 9, 15, 22, 23, 26,
" and 35, portions of said Sections—and more particu-
" larly described as follows:

" Fraction in Northwest quarter of Northwest quar-
" ter, and fraction in Southeast quarter of Northeast
" quarter of section eight (8); fraction in Southwest
" quarter of Southeast quarter of section nine (9); frac-
" tion in Southwest quarter of Northwest quarter, frac-
37 " tion in Northeast quarter of Southwest quarter, and
" fraction in Southwest quarter of Southeast quarter of
" section fifteen (15); fraction in Southeast quarter of
" Northeast quarter of section twenty-two (22); frac-
" tion in Southwest quarter of Southwest quarter of
" section twenty-three (23); fraction in Southeast quar-
" ter of Northwest quarter, and fraction in east half of
" Southwest quarter of section twenty-six (26); and
" fraction in east half of Northwest quarter of section
" thirty-five (35); all in township twenty-five (25);
" South, Range twenty-one (21) East, Mount Diablo
38 " meridian, and being all the swamp and overflowed
" lands in said subdivisions of said sections, and con-
" taining in all one hundred and twenty-four $\frac{30}{100}$,
" ($124\frac{30}{100}$) acres.

" Now, therefore, all the requirements of the Act of
" of Congress, as well as the Acts of the State Legis-
" lature, in relation to swamp and overflowed lands,
" having been fully complied with, I, William Irwin,
" Governor of the State of California, by virtue of au-
" thority in me vested, have granted, bargained, sold
" and conveyed, and by these presents do grant, bar-
" gain, sell and convey unto Henry Miller and Charles
39 " Lux, all the above described lands, with the appur-
" tenances thereunto belonging, to have and to hold,
" unto them, the said Henry Miller and Charles Lux,
" their heirs and assigns forever.

" In testimony whereof, I, William Irwin, Governor
" of the State of California, have caused these Letters
" to be made patent, and the Seal of the State of Cal-
" ifornia to be hereunto affixed.

"Given under my hand, at the City of Sacramento,
" this, the Seventeenth day of February, in the year

40 " of our Lord one thousand eight hundred and sev-
" enty-six.

" WILLIAM IRWIN,
" Governor of State.

" Attest:

[Great Seal of State.] " THOMAS BECK,
" Secretary of State.

" Countersigned:

[Seal of State Land Office.] " WM. MINIS,
" Register of State Land Office.

" Endorsed: Recorded at request of J. C. Crocker,
" March 6th, A.D. 1876, at 9 o'clock A.M., in Book
41 " Volumn Two of Land Patents, Records of Kern
" County, pages 1–2.

[Seal of Recorder.] " F. W. CRAIG,
" Recorder."

The plaintiffs then offered and read in evidence a Patent from the

State of California
to
Henry Miller and Charles Lux,

42 Dated September 11, 1876. Defendant makes the same objection to the introduction of this Patent, which it made to the introduction of the first Patent.

The objection is overruled and defendant excepts.

The Patent is then read in evidence and is in the words and figures following, to-wit:

" UNITED STATES OF AMERICA,
" State of California.

" *To all whom these presents shall come*—GREETING:

" WHEREAS, under the provisions of an Act of Con-
43 " gress of the United States, approved the twenty-
" eighth day of September, A. D. one thousand eight
" hundred and fifty, entitled, 'An Act to enable the
" State of Arkansas, and other States, to reclaim Swamp
" Land within their limits,' in which Act the manner
" of selecting and setting apart Swamp and Overflowed
" Lands is fully set forth; and, WHEREAS, the Legisla-
" ture of the State of California has provided for the
" sale and conveyance of said lands by statutes enacted
" from time to time; and, WHEREAS, It appears by the
" certificate of the Register of the State Land Office, No.
" 2162, bearing date September ninth, A. D. one thou-

44 " sand eight hundred and seventy-six, and issued in
" accordance with the provisions of law, that the tracts
" of Swamp and Overflowed Lands hereinafter described
" have been duly and properly surveyed in accordance
" with law; that full payment has been made to the
" State for the same, and that Henry Miller and
" Charles Lux, assignees of Julius Chester are entitled
" to receive a Patent therefor; said lands being situated
" in Kern County, and described as follows, to-wit:

" Surveys Nos. 102 and 103, swamp and overflowed
" lands, Kern County, Township No. 30 South, Range
" No. 24 East, Mount Diablo Meridian; Sections Nos.
45 " 6 and 8. Portions of said Sections are more partic-
" ularly described as follows:

" North half, North half of Southwest quarter, North
" half of Southeast quarter and Southeast quarter of
" Southeast quarter of Section Six (6); Northeast
" quarter, Northeast quarter of Northwest quarter, and
" Northeast quarter of Southeast quarter of Section
" Eight (8) in Township Thirty (30) South, Range
" Twenty-four (24) East, Mount Diablo Meridian;
" being embraced in Swamp Land Surveys Nos. 102
" and 103 of Kern County, and containing seven hun-
" dred and sixty (760) acres.

46 " Now, therefore, all the requirements of the Act of
" Congress, as well as the Acts of the State Legisla-
" ture in relation to Swamp and Overflowed Lands,
" having been fully complied with, I, William Irwin,
" Governor of the State of California, by virtue of
" authority in me vested, have granted, bargained, sold
" and conveyed, and by these presents do grant, bar-
" gain, sell and convey unto Henry Miller and Charles
" Lux, all the above-described lands, with the appur-
" tenances thereunto belonging, to have and to hold,
" unto them, the said Henry Miller and Charles Lux,
" their heirs and assigns, forever.

47 " In testimony whereof, I, William Irwin, Governor
" of the State of California, have caused these letters
" to be made Patent, and the Seal of the State of Cali-
" fornia to be hereunto affixed.

" Given under my hand, at the City of Sacramento,
" this the eleventh day of September, in the year of
" our Lord one thousand eight hundred and seventy-
" six.

" WILLIAM IRWIN,
" Governor of State.

" [Great Seal of State.]

48 " Attest:

" THOMAS BECK,
" Secretary of State.

" [Seal of State Land Office.]

" Countersigned:

" WM. MINIS,
" Register of State Land Office.

" By DUNCAN BEAUMONT, Deputy.

" (Endorsed.)

" Recorded at request of Wells, Fargo & Co., July
49 " second, 1877, ten minutes past nine o'clock, A. M., in
" Book Volume 2 of Land Patents of Kern County,
" page 160, 161.

" [Seal of Recorder.]

" F. W. CRAIG,
" Recorder."

The plaintiffs then offered and read in evidence a Patent from

50 the State of California
to
Henry Miller and Charles Lux,

dated June 15, 1877.

Defendant makes the same objection to the introduction of this Patent which it made to the introduction of the first Patent.

The objection is overruled, and defendant excepts.

The Patent is then read in evidence, and is in the words and figures following, to-wit:

" UNITED STATES OF AMERICA,
51 " State of California.

" *To all whom these presents shall come*—GREETING:

" Whereas, under the provisions of an Act of Con-
" gress of the United States, approved the twenty-eighth
" day of September, A. D. one thousand eight hundred
" and fifty, entitled 'An Act to enable the State of Ar-
" kansas, and other States, to reclaim swamp lands
" within their limits,' in which Act the manner of select-
" ing and setting apart swamp and overflowed lands is
" fully set forth. And whereas, the Legislature of
" the State of California has provided for the sale

52 " and conveyance of said lands by statutes, enacted
" from time to time; and whereas it appears by the
" certificate of the Register of the State Land Office,
" Number 2267, bearing date June 14th, A. D. one
" thousand eight hundred and seventy-seven, and issued
" in accordance with the provisions of law, that the
" tracts of swamp and overflowed lands hereinafter
" described have been duly and properly surveyed in
" accordance with law; and that full payment has been
" made to the State for the same, and that Henry Miller
" and Charles Lux are entitled to receive a Patent there-
" for; said lands being situated in Kern County, and
53 " described as follows, to-wit:
" Surveys Nos, 69, 70, 68, 67, 63, 75, 76, 88, 85, 78,
" 82, 79, 77, 177, and portions of 64, 61, 90, 87, 84, 81,
" and 99, Swamp and Overflowed Lands, Kern County,
" Townships Nos. 28, 29 and 30 South, Ranges Nos.
" 22, 23 and 24 East, Mt. Diablo Meridian. Sections
" Nos. 4 and 16, and portions of Secs. 8, 22, 26, 28, 34,
" T. 28 S., R. 22 E. Portions of Secs. 2 and 12, T.
" 29 S., R. 22 E. Secs. 26, 36, and portions of Secs.
" 6, 8, 16, 18, 20, 22, 28, and 34, T. 29 S., R. 23 E. Por-
" tion of Sec. 1, T. 30 S., R. 23 E., and portion of Sec.
" 10, T. 30 S., R. 24 E and more particularly described
54 " as follows:
" Sections 4; E. ½ of N. E. ¼ and N. E. ¼ of S. E. ¼
" of Section 8; Section 16; W. ½ of Section 22; S. ½ of
" Section 26; N. ½ of N. E. ¼ and S. E. ¼ of N. E. ¼ of
" Section 28; N. ½ of N. E. ¼, S. E. ¼ of N. E. ¼ and
" N. E. ¼ of S. E. ¼ of Section 34, in Township 28
" South, Range 22 East; E. ½ of N. E. ¼ and N. W. ¼
" of N. E. ¼ of Section 2; N. E. ¼ and N. E. ¼ of S. E.
" ¼ of Section 12, in Township 29 South, range 22 East
" —W. ½ of Section 6; W. ½ of Section 8; W. ½ of Sec.
" 16; E. ½ of N. E. ¼ and N. W. ¼ of N. E. ¼ of Section
" 18; E. ½ of N. E. ¼ and N. W. ¼ of N. E. ¼ of Sec. 20;
55 " W. ½ of Section 22; Section 26; N. E. ¼ and N. E. ¼
" of N. W. ¼ of Section 28; N. E. ¼ of N. E. ¼ of Sec-
" tion 34 and Section 36, in Township 29 South,
" Range 23 East; N. ½ of N. E. ¼, S. E. ¼ of N. E. ¼,
" and N. E. ¼ of N. W. ¼ of Section 1, in Township
" 30 South, Range 23 East; and W. ½ of Section 10,
" in Township 30 South, Range 24 East. All of Mt.
" Diablo Meridian, being the land embraced and more
" particularly described in the field notes of Swamp
" Land Surveys of Kern County, Nos. 69, 70, 68, 67,
" 63, 75, 76, 88, 85, 78, 82, 79, 77, 177, and portions

56 " of 64, 61, 90, 87, 84, 81, and 99, and containing in
" the aggregate six thousand one hundred and sixty
" (6,160) acres, more or less.

" Now, therefore, all the requirements of the Act of
" Congress, as well as the Acts of the State Legislature,
" in relation to swamp and overflowed lands, having
" been fully complied with, I, William Irwin, Governor
" of the State of California, by virtue of authority in
" me vested, have granted, bargained, sold, and con-
" veyed and by these presents do grant, bargain, sell,
" and convey unto Henry Miller and to Charles Lux all
" the above described lands, with the appurtenances
57 " thereunto belonging, to have and to hold unto them,
" the said Henry Miller and Charles Lux, their heirs
" and assigns, forever.

" In testimony whereof, I, William Irwin, Governor
" of the State of California, have caused these letters
" to be made patent, and the seal of the State of Cali-
" fornia to be hereunto affixed.

" Given under my hand, at the city of Sacramento, this
" the fifteenth day of June, in the year of our Lord one
" thousand eight hundred and seventy-seven.

" WILLIAM IRWIN,
58 " Governor of State.

" [Great Seal of State.]

" Attest:

" THOS. BECK,
" Secretary of State.

" [Seal of State Land Office.]

" Countersigned.

" WILLIAM MINIS,
" Register of Land Office.

59 " (Endorsed.)

" Recorded at request of Wells, Fargo & Co., July
" 2d, 1877, at 30 minutes past 9 o'clock A. M., in Book
" Volume 2 of Land Patents of Kern County, pages
" 161, 162, and 163.

" [Seal of Recorder.]

" F. W. CRAIG,
" Recorder."

60 The plaintiffs then offered and read in evidence a deed from

Henry Miller and Charles Lux
to
James C. Crocker,

dated July 26, 1872, acknowledged July 27, 1872, and recorded October 7, 1872.

Defendant objects to the introduction of this deed on the ground that it is incompetent and irrelevant and shows no title.

The objection is overruled and defendant excepts.

61 The deed is then read in evidence, and is in the words and figures following, to-wit:

[United States Internal Revenue stamps, fifty cents, cancelled.]

" This indenture, made the 26th day of July, in the
" year of our Lord one thousand eight hundred and
" seventy-two, between Henry Miller and Charles Lux,
" of the city and county of San Francisco and State of
" California, the parties of the first part and James C.
" Crocker, of the county of Santa Clara and State afore-
" said, the party of the second part, witnesseth that the
" said parties of the first part, for and in consideration
" of the sum of one dollar ($1.00) and portion of lands,
62 " to them in hand paid by the said party of the second
" part, the receipt whereof is hereby acknowledged, have
" granted, bargained and sold, conveyed and confirmed,
" and by these presents do grant, bargain and sell, con-
" vey and confirm unto the said party of the second part,
" and to his heirs and assigns forever, all the undivided
" one-third ($\frac{1}{3}$) of the South half of the North half and the
" South half of Section Sixteen (16) in Township Thirty
" (30) South, Range Twenty-one (21) East; also, all Sec-
" tion Sixteen (16), and the north half of Section Thirty-
" six (36), Township Twenty-eight (28) South, Range
" Nineteen (19) East; also, all of Section Sixteen (16)
63 " and the Northeast quarter and the North half of the
" Southeast quarter and the East half of the Northwest
" quarter and the Northwest quarter of the Northwest
" quarter of Section Thirty-six (36), Township Twenty-
" nine (29) South, Range Twenty (20) East; also, the
" East half of Section Eighteen (18) and the West half
" and the Southeast quarter of Section Seventeen (17),
" Township Thirty (30) South, Range Twenty (20) East;
" also, the West half and the Southeast quarter of Sec-
" tion Six (6), the Northeast quarter of Section Seven
" (7), the West half of Section Eight (8), the West half

64 " of Section Seventeen (17), the North half of Section
" Eighteen (18), all of Section Nineteen (19), all of Sec-
" tion Twenty (20), the Southwest quarter of Section
" Twenty-one (21), the South half of Section Twenty-six
" (26), the South half of Section Twenty-seven (27), the
" South half and the Northeast quarter of Section
" Twenty-eight (28), the Northeast quarter of Section
" Twenty-nine (29), the Northeast quarter of Section
" Thirty-three (33), all of Section Thirty-four (34), and
" the Northwest quarter of Section Thirty-five (35), in
" Township Twenty-nine (29) South, Range Twenty-one
" (21) East, containing eightthousand five hundred and
65 " nineteen and ninety-one hundredths of acres. Also,
" the undivided one-third ($\frac{1}{3}$) of that certain parcel of
" swamp and overflowed land conveyed to Henry Miller
" and Charles Lux by Thomas Baker, Julius Chester,
" Horatio P. Livermore and John H. Redington, by
" deed bearing date the twenty-eighth (28) day of May,
" A. D. one thousand eight hundred and seventy (1870),
" said tract containing fourteen thousand and forty-four
" (14,044) acres. Together with all and singular the
" tenements, hereditaments and appurtenances there-
" unto belonging or in anywise appertaining, and the
" reversion and the reversions, remainder and remaind-
66 " ers, rents, issues and profits thereof; and also all the
" estate, right, title, interest, property, possession,
" claim and demand whatsoever, as well in law as in
" equity, of the said parties of the first part of, in
" or to the above mentioned premises and every part and
" parcel thereof, with the appurtenances. To have and
" to hold all and singular the above mentioned and de-
" scribed premises, together with the appurtenances,
" unto the said party of the second part, his heirs and
" assigns forever.

" In witness whereof, the said parties of the first part
" have hereunto set their hands and seals the day and
67 " year first above written.

" HENRY MILLER. [SEAL.]
" CHAS. LUX. [SEAL.]

" Signed, sealed and delivered in the presence of
" J. H. BLOOD.

(Duly acknowledged.)

" Recorded at the request of P. T. Colby, October 7,
" A. D. 1872, at 9 A. M., in Book 2 of Deeds, pages
" 370–371. A. A. BERMUDEZ,
" Recorder.

" By E. COHN, Deputy."

68 The plaintiffs then offered and read in evidence a deed from

Henry Miller and Charles Lux
to
James C. Crocker,

dated October 28, 1875, acknowledged March 2, 1876, and recorded March 8, 1877. Defendant objects to the introduction of this deed on the ground that it is incompetent and irrelevant, and shows no title. The objection is overruled and defendant excepts. The deed is then read in evidence, and is in the words and figures following, to-wit:

69 " This indenture, made the twenty-eighth day of Octo-
" ber, one thousand eight hundred and seventy-five, be-
" tween Henry Miller and Charles Lux, of the City and
" County of San Francisco, and State of California, the
" parties of the first part, and James C. Crocker, of the
" County of Santa Clara, and State aforesaid, the party
" of the second part witnesseth, That the said parties of
" the first part, for and in consideration of the sum of one
" dollar, in gold coin of the United States of America,
" to them in hand paid by the said party of the second
" part, at or before the ensealing and delivery of these
70 " presents, the receipt whereof is hereby acknowledged,
" have granted, bargained and sold, conveyed and con-
" firmed and by these presents do grant, bargain and sell,
" convey and confirm, unto said party of the second part,
" and to his heirs, and assigns forever, all the undivided
" one-third ($\frac{1}{3}$) of the following parcels of land, to-wit: Of
" Swamp Land surveys of the County of Kern, numbered
" two hundred and ninety-four (294) two hundred and
" ninety-five (295) and two hundred and ninety-six (296),
" containing one hundred and twenty-four acres and
" thirty-one hundredths ($124\frac{30}{100}$), including the frac-
" tional pieces of Swamp and Overflowed Land in the
71 " Northwest quarter of the Northwest quarter, and the
" Southeast quarter of the Northeast quarter of Section
" Eight (8), the Southwest quarter of the Southeast
" quarter of Section Nine (9), the Southwest quarter of
" the Northwest quarter the Northeast quarter of the
" Southwest quarter, the Southwest quarter of the South-
" east quarter of Section Fifteen (15), the Southeast
" quarter of the Northeast quarter of Section Twenty-two
" (22); the Southwest quarter of the Southwest quarter
" of Section Twenty-three (23), the Southeast quarter of
" the Northwest quarter, and East half of the Southwest
" quarter of Section Twenty-six (26), and in the East half

72 " of the Northwest quarter of Section Thirty-five (35), all
" in Township Twenty-five (25) South, of Range Twenty-
" one (21) East, of the Mount Diablo base and meridian.
" Also, of the South half of Section Eighteen (18), and
" the Northwest quarter of Section Twenty-eight (28), in
" Township Twenty-nine (29) South, of Range Twenty-
" one (21) East, of the Mount Diablo base and meridian,
" erroneously described in a certain deed of July 26,
" 1872, as the North half of Eighteen, and Northeast
" quarter of Section Twenty-eight; together with all and
" singular, the tenements, hereditaments and appurten-
" ances thereunto belonging, or in any wise appertain-
73 " ing, and the reversion and reversions, remainder and
" remainders, rents, issues and profits thereof; and also
" all the estate, right, title, interest, property, possession
" claim and demand whatsoever, as well in law as in
" equity of the said parties of the first part, of, in, or to
" the above-described premises, and every part and
" parcel thereof, with the appurtenances; to have and to
" hold, all and singular the above-mentioned and
" described premises, together with the appurtenances,
" unto the said party of the second part, his heirs and
" assigns forever.

" In witness whereof, the said parties of the first part
74 " have hereunto set their hands and seals, the day and
" year first above written.

" HENRY MILLER. [SEAL.]
" CHAS. LUX. [SEAL.]

" Signed, sealed and delivered in presence of
" WILLIAM HARNEY.

" Duly acknowledged.

" (Endorsed.) Recorded at request of Wells, Fargo
" & Co., March 8th, A. D. 1877, at 35 minutes past 9
" A. M., in Liber seven of Deeds, page 43–44, Records of
" Kern County.

75 " F. W. CRAIG,
" Recorder.
" By H. A. BLODGET,
" Deputy."

The plaintiff then offered and read in evidence a deed from

Thomas Baker, Julius Chester, H. P. Livermore and John H. Redington

to

Henry Miller and Charles Lux,

dated May 28, 1870, and acknowledged on the same

76 day by H. P. Livermore for himself and as attorney for the other three grantors, and recorded June 13, 1874.

Defendant objects to the introduction of this deed, upon the ground that there is no title shown in the grantors; that it is irrelevant, immaterial and incompetent, and that the deed is not properly signed according to the requirements of the law.

The objection is overruled and defendant excepts.

The deed is then read in evidence, and is in the words and figures following, to wit:

77 [U. S. Int. Rev. Stamps, $23, Cancelled.]

" This indenture, made the twenty-eighth day of May, " in the year of our Lord one thousand eight hundred " and seventy, between Thomas Baker and Julius Ches- " ter, both of the County of Kern and State of Califor- " nia, and Horatio P. Livermore and John H. Reding- " ton, both of the City and County of San Francisco and " State aforesaid, parties of the first part, and Henry " Miller and Charles Lux, both of the City and County " of San Francisco and State of California, parties of the " second part, witnesseth: That the said parties of the " first part, for and in consideration of the sum of twenty-
78 " two thousand six hundred and sixty-three dollars and " four cents ($22,663$\frac{04}{100}$), in gold coin of the United States " of America, to them in hand paid, by the said parties " of the second part, the receipt whereof is hereby ac- " knowledged, have granted, bargained, sold, aliened, " remised, released, conveyed and confirmed, and by " these presents do grant, bargain, sell, alien, remise, re- " lease, convey and confirm unto the said parties of the " second part, and to their heirs and assigns, forever, all " those certain lots, pieces or parcels of land lying and " being in the County of Kern and State of California, " and more particularly bounded and described as fol-
79 " lows, to wit: Those tracts of land designated on the " official plats of the U. S. Government survey as all of " Section Four (4), the East half of the Northeast quarter, " and the Northeast quarter of the Southeast quarter of " Section Eight (8), all of Section Sixteen (16), the West " half of Section Twenty-two (22), the South half of Sec- " tion Twenty-six (26), the North half of the Northeast " quarter and the Southeast quarter of the Northeast " quarter of Section Twenty-eight (28), and the North " half of the Northeast quarter, the Southeast quarter of " the Northeast quarter, and the Northeast quarter of the

80 " Southeast quarter of Section Thirty-four (34); all in
" Township Twenty-eight South of Range Twenty-two
" (22), East of the Mount Diablo base and meridian;
" also, the East half of the Northeast quarter and the
" Northwest quarter of the Northeast quarter of Section
" Two (2), and the Northeast quarter, and Northeast
" quarter of the Southeast quarter of Section Twelve
" (12); all in Township Twenty-nine (29) South of Range
" Twenty-two (22), East of the Mount Diablo base and
" meridian; also, the West half of Section Six (6), the
" West half of Section Eight (8), the West half of Section
" Sixteen (16), the East half of the Northeast quarter and
81 " the Northwest quarter of the Northeast quarter of Sec-
" tion Eighteen (18), the East half of the Northeast
" quarter and the Northwest quarter of the Northeast
" quarter of Section Twenty (20), the West half of Sec-
" tion Twenty-two (22), all of Section Twenty-six (26),
" the Northeast quarter, and the Northeast quarter of
" the Northwest quarter of Section Twenty-eight (28), the
" Northeast quarter of the Northeast quarter of Section
" Thirty-four (34), and all of Section Thirty-six (36); all
" in Township Twenty-nine (29) South of Range Twenty-
" three (23), East of the Mount Diablo base and meridian;
" also, the North half of the Southwest quarter, the East
82 " half of the Southeast quarter, and the Northwest quar-
" ter of the Southeast quarter, and the North half of
" Section Six (6), the Northeast quarter of the North-
" west quarter, the Northeast quarter of the South-
" east quarter, and the Northeast quarter of Sec-
" tion Eight (8), and the West half of Section Ten (10);
" all in Township Thirty South, of Range Twenty-four
" (24) East of said base and meridian; the above-men-
" tioned lands containing six thousand seven hundred
" and eighty-one acres and twenty hundredths of an acre,
" more or less ($6,781\frac{20}{100}$); it being understood and agreed
" between all the parties to this instrument that the par-
83 " ties of second part shall assume, and do hereby assume,
" the payment of the money remaining due to the State
" of California on all the before-mentioned lands, the
" said parties of the second part hereby agreeing to pay
" the same. Also, the East half of Section Five (5), all
" of Section Nine (9), the East half of the West half and
" the East half of Section Twenty-one (21), all of
" Section Twenty-seven (27), except the Southwest
" quarter of the Southwest quarter; and all of Sec-
" tion Thirty-five (35), all in Township Twenty-eight

84 " South of Range Twenty-two (22), East of the Mount
" Diablo base and meridian; also, all of Section One (1),
" in Township Twenty-nine (29), South of Range Twenty-
" two (22) East, of said base and meridian; also, all of
" Section Seven (7), except the Southwest quarter of the
" Southwest quarter; all of Section Seventeen, except
" the Southwest quarter of the Southwest quarter; all of
" Section Twenty-one (21), all of Section Twenty-seven,
" except the South half of the Southwest quarter; the
" Northeast quarter, the North half and Southeast quar-
" ter of the Northwest quarter, and the Northeast quarter
" of the Southeast quarter of Section Thirty-five (35), all
85 " in Township Twenty-nine, South of Range Twenty-
" three (23), East of said base and meridian; also, all of
" Section Five (5), and all of Section Nine (9), except the
" South half of the Southwest quarter, all in Township
" Thirty, South of Range Twenty-four (24), East of said
" base and meridian, and containing seven thousand two
" hundred and sixty-two acres and eighty hundredths of
" an acre ($7,262\frac{80}{100}$), more or less. Together with all and
" singular the tenements, hereditaments and appurten-
" ances thereunto belonging or in anywise appertaining,
" and the reversion and reversions, remainder and re-
" mainders, rents, issues, and profits thereof; and also all
86 " the estate, right, title, interest, property, possession,
" claim, and demand whatsoever, as well in law as in eq-
" uity, of the said parties of the first part of, in, or to the
" said premises, and every part or parcel thereof, with the
" appurtenances thereunto belonging; provided, that the
" parties of the first part, their heirs, executors, adminis-
" trators, and assigns shall have the right of way over all
" the before-mentioned lands for canal ditches and levees
" for purposes of reclamation, and the right to use the
" names of the parties of the second part as parties to any
" organization for the purpose of reclaiming the lands
" adjoining, without the said parties of the second part
87 " incurring or becoming liable for any expense thereby,
" without their further consent having been obtained
" thereto, the said parties of the second part to enjoy all
" the privileges which the said parties of the first part
" may acquire in consequence of any such organization.
" To have and to hold, all and singular, the said prem-
" ises, together with the appurtenances, unto the said
" parties of the second part, their heirs, executors, ad-
" ministrators, and assigns, forever.
" In witness whereof the said parties of the first part

88 " have hereunto set their hands and seals, the day and
" year first above written.

" THOMAS BAKER, [SEAL.]
" By HORATIO P. LIVERMORE, Att'y.

" JULIUS CHESTER, [SEAL.]
" By HORATIO P. LIVERMORE, Att'y.

" HORATIO P. LIVERMORE. [SEAL.]

" JOHN H. REDINGTON, [SEAL.]
" By HORATIO P. LIVERMORE, Att'y.

" (Duly acknowledged.)

89 Signed, sealed, and delivered in the presence of " the
' words six (6) and the figure (6) being erased on line
" 8 of page 4, and the word and figure 'one' (1) inserted
" before signing."

" J. H. BLOOD.

" (Endorsed.)

" Recorded at request of R. H. Stretch, June 13th
" A. D. 1874, at 2 o'clock P. M., in Book Vol. 3 of Deeds,
" pages 267 268, 269, 270.

" F. W. CRAIG,
90 " Recorder Kern Co., Cal."

The plaintiff then offered and read in evidence the Judgment Roll in the case of *The People of the State of California* vs. *John Center et al.*, in the District Court of the Twelfth Judicial District of the State of California, in and for the City and County of San Francisco, wherein the following judgment and decree was duly rendered and entered, to-wit:

91 " *In the District Court of the Twelfth Judicial District of*
" *the State of California, in and for the City and*
" *County of San Francisco.*

" The People of the State of California, upon
" the relation of John L. Love, Attor-
" General,

vs.

" John Center,	Horatio Stebbins,
" Julius Chester,	Jefferson G. James,
" Charles A. Bayley,	Thomas Nelson,
" Emma Jones,	E. C. Douglas,

92 " Carolina Douglass, F. A. Tracy,
" Philo D. Jewett, Richard Hudnut,
" Horatio P. Livermore, Henry Miller,
" James C. Crocker, James Patterson,
" Warren Bryant, Delos Lake,
" Charles E. Livermore, Celsus Brower,
" Cuthbert Burrel, George F. Smith,
" L. H. Bonestell, Abner Doble,
" H. W. Woodward, Jesus Douglas,
" Henry A. Jastro, Solomon Jewett,
" Benjamin Brundage, Mary B. Brundage,
" John H. Redington, Charles Lux,
93 " Stephen W. Shaw, James T. Boyd,
" Thomas O. Carter, James B. Williams,
" and others, Defendants.

" This cause came on regularly for trial; William M.
" Stewart and C. R. Greathouse appeared for the
" plaintiffs.

" R. E. Houghton and Warren Olney appeared for
" the defendants, Charles E. Livermore, Celsus Brower,
" Cuthbert Burrel, George F. Smith, L. H. Bonestell,
" Abner Doble, H. W. Woodward, Jesus Douglass,
" Henry A. Jastro, Solomon Jewett, Benjamin Brun-
94 " dage, Mary B. Brundage, John H. Redington, Ho-
" ratio Stebbins, Julius Chester, Jefferson G. James,
" Charles A. Bayley, Thomas Nelson, Emma Jones, E.
" C. Douglass, Caroline Douglass, F. A. Tracy, Philo
" D. Jewett, Richard Hudnut, Horatio P. Livermore,
" Henry Miller, Charles Lux, and J. C. Crocker.

" Clark Churchill appeared for defendant, John
" Center.

" George A. Nourse appeared for defendant Stephen
" W. Shaw.

" Dwight K. Tripp appeared for defendant James
" Patterson.

95 " Philip P. Galpin appeared for defendants James
" T. Boyd, Warren Bryant, Thomas O. Carter and
" Delos Lake.

" James T Boyd appeared for defendant James B.
" Williams.

" A trial by jury having been expressly waived by
" the counsel for the respective parties, the cause was
" tried before the Court sitting without a jury.

" Whereupon witnesses on the part of plaintiff and
" defendants were duly sworn and examined and docu-
" mentary evidence introduced, and the evidence being
" closed the cause was submitted to the Court for con-

96 " sideration and decision upon the issue arising under
" the pleadings filed prior to March 20, 1878, to-wit:
" As to the validity of the document signed by the
" Governor of the State of California, and counter-
" signed by the Register of the State Land Office, and
" dated November 11, 1867, which is annexed to the
" complaint and marked 'Exhibit A.'

" All of the counsel in the case having demanded in
" open court that said issue be tried separately, and a
" judgment rendered thereon before taking up and try-
" ing the issues arising under the complaint, and the
" answers filed since said twentieth day of March, 1878,
97 " and after due deliberation thereon the Court deliv-
" ered its finding and decision in writing upon said
" issue, which is filed, and orders that judgment be
" entered in accordance therewith. Wherefore, by
" reason of the law and the finding aforesaid, it is
" ordered, adjudged and decreed, that the instrument
" annexed to the complaint and marked 'Exhibit A,'
" dated November 11, 1867, issued to W. F. Mont-
" gomery, Joseph Montgomery, A. J. Downer, and F.
" W. Sampson, their successors and assigns, and
" signed by Frederick F. Low, as the Governor of the
" State of California, and countersigned by J. F.
98 " Houghton, as Register of the State Land Office of
" the State of California, for certain lands in Tulare
" Valley, be, and the same is hereby revoked, annulled
" and set aside.

" It is further ordered, adjudged, and decreed, that
" the defendants herein have not, nor has any of them,
" any right, or title, or interest in or to the land
" described in said 'Exhibit A,' or in any part thereof,
" under the acts of the Legislature referred to in the
" complaint.

" And it is further ordered, adjudged, and decreed,
" that the title of plaintiff in and to said land, and the
99 " whole thereof be quieted as against said pretended
" claims of defendants herein.

" And it is further ordered, adjudged, and decreed,
" that plaintiff have judgment against the defendants
" for its costs herein expended, amounting to 220\frac{60}{100}$,
" as taxed by the Court, October 18th, 1878.

" Sept. 17th, 1878.

" Wm. P. Daingerfield,
" District Judge."

" Judgment recorded, K 272.
" November 2nd, 1878.
" (Endorsed.) "

100 "Judgment upon findings on issues arising upon
" pleadings filed prior to March 20, 1878."
" Filed Sept. 17, 1878."

That "Exhibit A," mentioned and referred to in said judgment, is contained in said Judgment Roll, and is in the words and figures following, to wit:

"EXHIBIT A."

"UNITED STATES OF AMERICA,
" State of California.

" *To all to whom these presents shall come*—GREETING:

101 " Whereas, under the provisions of an Act of Con-
" gress of the United States, approved the twenty-
" eighth day of September, A. D. one thousahd eight
" hundred and fifty, entitled 'An Act to enable the
" State of Arkansas, and other States, to reclaim swamp
" land within their limits,' in which Act the manner of
" selecting and setting apart swamp and overflowed
" lands are fully set forth. And, whereas, in accord-
" ance with the provisions of the Act of Congress
" above recited, the Legislature of the State of
" California, on the 11th day of April, A. D. one
102 " thousand eight hundred and fifty-seven, passed an Act,
" entitled 'An Act to provide for the construction of
" canals, and for draining and reclaiming certain swamp
" and overflowed lands in Tulare Valley,' and on the
" 10th day of April, A. D. one thousond eight hundred
" and sixty-two, passed an Act amendatory thereof and
" and supplementary thereto; and on the twenty-fifth
" day of April, A. D. one thousand eight hundred and
" sixty-three, passed an Act, entitled 'An Act in rela-
" tion to the construction of canals, and reclaiming
" certain swamp and overflowed lands in Tulare Val-
" ley,' under the provisions of which Act certain swamp
103 " and overflowed lands belonging to the State are
" granted, under conditions and specifications therein
" set forth, to W. F. Montgomery, Joseph Montgomery,
" A. J. Downer, F. W. Sampson, and their associates
" and assigns. And, whereas, the above named
" grantees, and their assigns, have made and executed
" a release to the State of California, of all lands enur-
" ing to them under the provisions of the above recited
" acts, except those hereinafter mentioned and speci-
" fied; and whereas, the engineer appointed by the
" Governor and Surveyor-General of the State of Cali-
" fornia to examine and report upon the reclamation of

104 " said swamp and overflowed land, as provided in sec-
" tion six of the Act of April 10th, A. D. one thousand
" eight hundred and sixty-two, above recited, has certi-
" fied to the reclamation of the following described
" lands, to wit: The East half of Section Five (5); the
" whole of Section Nine (9); the East half, the East
" half of the Northwest quarter and the East half of
" the Southwest quarter of Section Twenty-one (21);
" the East half, the Northwest quarter, the East half
" of Southwest quarter, and the Northwest quarter of
" the Southwest quarter of Section Twenty seven (27);
" and the whole of Section Thirty five (35), in Township
105 " Twenty-eight (28) South Range Twenty-two (22) East;
" the whole of Section One (1) in Township Twenty-
" nine (29) South Range Twenty-two (22) East; the North
" half, the Northwest quarter of the Southwest quarter,
" the East half of the Southwest quarter, and the
" Southeast quarter of Section Seven (7); the North
" half, the Northwest quarter of the Southwest quar-
" ter, the East half of Southwest quarter, and
" the Southeast quarter of Section Seventeen (17);
" the whole of Section Twenty-one (21), the North half,
" the North half of the Southwest quarter and the South-
" east quarter of Section Twenty-seven (27); the North-
106 " east quarter, the East half of Northwest quarter, the
" Northwest quarter of the Northwest quarter, and the
" Northeast quarter of the Southeast quarter of Section
" Thirty-five (35), in Township Twenty-nine (29) South,
" Range Twenty-three (23) East; the whole of Section
" (5), the North half, the North half of the Southwest
" quarter, and the Southeast quarter of Section Nine
" (9), in Township Thirty (30) South, Range Twenty-
" four (24) East; all of Mount Diablo Base and Me-
" ridian.

"(And other lands.)

107 "Now, therefore, all the requirements of the Act of
" Congress, as well as the above named Acts of the State
" Legislature in relation to swamp and overflowed lands
" having been fully complied with, and in further con-
" sideration that the said grantees and their assigns
" have by said instrument of release, released and do
" hereby release all right or title to any and all fran-
" chises, privileges, and all lands granted by the said
" Acts of the Legislature, except the lands hereinabove
" described, and do hereby relinquish any and every
" claim granted by said Acts, except to the above
" described lands: I, Fredk. F. Low, Governor of the

108 "State of California, by virtue of authority in me
"vested, have granted, bargained, sold and conveyed,
"and by these presents do grant, bargain, sell and con-
"vey, unto W. F. Montgomery, Joseph Montgomery,
"A. J. Downer, F. W. Sampson, and their associates
"and assigns, all the above described lands, with the
"appurtenances thereunto belonging. To have and to
"hold, unto them, the said W. F. Montgomery, Joseph
"Montgomery, A. J. Downer, F. W. Sampson, and
"and their associates and assigns, their heirs and
"assigns forever.

"In testimony whereof, I, Fredk. F. Low, Governor
109 "of the State of California, have caused these letters to
"be made patent and the seal of the State of California
"to be hereunto affixed.

"Given under my hand at Sacramento, this eleventh
"day of November, in the year of our Lord one thousand
"eight hundred and sixty seven.

"FREDK. F. LOW,
"Governor of State.

"[Seal of State.] Attest:
"BENJN. B. REDDING,
"Secretary of State.

110 "Countersigned: "J. F. HOUGHTON,
"Register of State Land Office.

"Recorded at request of B. Brundage, on pages
"430, 431, 432, 433, 434, 435, 436, and 437, of Vol. 1,
"Record of Deeds of Kern County, State of Califor-
"nia, March 22d, A. D. 1869, at 10 o'clock A. M.

"Attest my hand and Seal:

"[Recorder's Seal.] "H. D. BEQUETTE,
"County Recorder.

"Filed for record in State Land Office October 31st,
"A. D. 1874.

111 "ROBERT GARDNER,
"Register of State Land Office."

That in said action it was by the Court found that the plaintiffs herein, who had appeared in said case as required by an Act of the Legislature of the State of California, entitled "An Act to provide for determining the rights of parties in certain swamp and overflowed lands in Fresno and Kern Counties, approved March 20, 1878," were entitled to have and recover judgment for certain lands described in said finding, and said finding is in the words and figures following:

112 "VII."

"That the Defendants, Henry Miller, Charles Lux and
" J. C. Crocker, are claimants in good faith by virtue of
" a direct deraignment of title from W. F. Montgomery,
" Joseph Montgomery, A. J. Downer and F. W. Samp-
" son, of the lands next hereinafter described. That
" they paid the full value for said lands, and are now,
" and for many years last past have been, by themselves
" or tenants, in the actual occupation thereof. That they
" and their grantors have paid State and county taxes
" thereon, amounting to one thousand seven hundred
113 " and thirty-four dollars $\frac{02}{100}$ ($1,734$\frac{02}{100}$), and have expended
" since the eleventh day of November, A. D. 1867, in
" reclaiming and for permanent improvements upon
" said lands the sum of thirty-eight thousand and sixty
" dollars, which said sums amount to more than one
" dollar ($1) per acre for the whole of the lands so
" claimed by them. Said lands so claimed by said
" Henry Miller, Charles Lux and J. C. Crocker, as
" aforesaid, and upon which they have paid the State
" and county taxes and made expenditures as aforesaid,
" are situate in the county of Kern, State of California,
" and are described as follows:

114 "The East half of Section Five (5), the whole of Sec-
" tion Nine (9); the East half of West half, East half of
" Section Twenty-one (21); the East half, Northwest
" quarter, north half of Southwest quarter, Southeast
" quarter of Southwest quarter of Section Twenty-
" seven (27); the whole of Section Thirty-five (35); all
" in Township Twenty-eight (28) South, Range Twenty-
" two (22) East, of Mount Diablo base and meridian.

"The whole of Section One (1), in Township Twen-
" ty-nine (29) South, Range Twenty-two (22) East, same
" base and meridian.

115 "The East half, Northwest quarter, North half of
" Southwest quarter, Southeast quarter of Southwest
" quarter of Section Seven (7); the East half, north-
" west quarter, north half of Southwest quarter, south-
" east quarter of Southwest quarter of Section Seven-
" teen (17); the whole of Sec. Twenty-one (21); the north
" half of Southwest quarter, North half, Southeast
" quarter of Section Twenty-seven (27); the Northeast
" quarter, North half of Northwest quarter, Southeast
" quarter of Northwest quarter, Northeast quarter of
" Southeast quarter of Section Thirty-five (35), in

116 "Township Twenty-nine (29) South, Range Twenty-
" three (23) East, same base and meridian.

"The whole of Section Five (5), the East half, the
" Northwest quarter, North half of Southwest quarter
" of Section (9), in Township Thirty (30), South, Range
" Twenty-four (24) East, same base and meridian.

"Containing in the aggregate seven thousand two
" hundred and forty (7,240) acres, more or less."

And by the decree entered in said case on the 17th day of September, 1878, it was ordered, adjudged, and decreed that the plaintiffs herein, Henry Miller, Charles Lux and James C. Crocker, have judgment for such land
117 and are entitled to a patent for the same, as in the said Act provided.

That the land in said findings and decree and in said "Exhibit A" described, are a part of the land in the amended complaint described.

To the introduction of which decree and findings defendants objected on the ground that the same were incompetent, irrelevant and *res inter alios acta;* which objection was overruled, and defendants excepted, and thereupon the same were read in evidence.

118 ALEXIS GODEY,

Called as a witness for plaintiff, sworn, testifies:

I reside in Kern County, on the San Emedio Ranch, which is 25 miles south of Bakersfield. I have resided here since 1853. I first passed through Kern County in 1844. I then crossed Kern River near Seanger's slaughter house, about this canal branch, and camped right where the bridge crosses from 3d street to Sumner. I camped there on Kern River. The river at that time ran by that point, and through that channel passed close to the mill by Charles Kerr, and where the adobe station is now,
119 and ran into Kern Lake at the northeast end of Kern Lake. From Bakersfield it ran near south, probably a little west of south. It had a name in 1844. The Indians called it Poson Culo. It was an Indian name. It is an ancient name, and is in Fremont's report of 1844, or ought to be.

Q—Is the channel there now, or an indication of it?

A—Yes, sir.

Q—What is that channel called now?

A—Now it is called the old slough of Kern River. It is also called the south fork of Kern River. That chan-

120 nel of the south fork was the main river in 1844, and also in 1851 and 1853. The same channel, which is now called the south fork, was the one I saw in 1851 and 1853. It emptied into the northeast end of Kern Lake.

Q—How long did that remain or continue as the main channel of Kern River?

A—It remained the main channel until the winter of 1862, when part of it broke in where the river runs at present, and then in 1868 most of the water went where the river now runs.

Q—What kind of a channel was that, Mr. Godey, between 1844, when you first saw it, and the time of the
121 change in 1852?

A—It was a swift channel of water.

Q—Running all the year?

A Oh, yes, every year. Nearly all of the water would run that way.

Q—How would you ford or cross that river?

A—When I crossed it I cut tules and made a tule raft, and crossed the baggage on the tule raft. I crossed it in 1844, and also in 1853; I crossed it on the tule raft. We had a bridge this side of where Charlie Kerr lives now. Had two high banks. We had a bridge there to
122 cross. We crossed on a willow pole and swam the horses in the water. That point I speak of where the bridge was was 13 or 14 miles, probably, south of Bakersfield. Sometimes the high water would take that bridge off, and it would be rebuilt again every dry season.

Q—What was the condition of the land, Mr. Godey, between here and Kern Lake, along where the old river ran?

A—Well, when the river would rise it would overflow quite a space, and it would be boggy. There was very few watering places for stock at time of high water. When the river fell during the summer and fall, you could
123 reach there and then water your stock. In high water it was very hard to cross that river. In an average state of water there were very few crossing places. There was the one here at this bridge, between here and Sumner, and the one where this bridge was that I have spoken of. They were the two principal crossings.

Q—When do I understand you to say that the channel changed?

A—It partly changed in 1862, and then in 1867 and 1868—in the spring of 1868.

Q—After the water ran through what we now call

124 South Fork, and which you describe as the river prior to 1862, and ran into the north end of Kern Lake, where did it continue to?

A—It continued from Kern Lake to Buena Vista Lake in the connecting large slough, and through a large body of swamp land and a tule land impracticable to cross; and from Buena Vista Lake toward Tulare Lake, through a channel overflowing the tule lands.

Q—What channel was there running between Buena Vista Lake and Tulare Lake, and what was it called?

A—Why, I have no name for it except a natural slough—a naked slough with tules on each side; a large
125 body of tules.

Q—Is it the same slough as it was at that time that is now called Buena Vista slough?

A—Yes, sir; the same slough.

Q—Was the slough in the same condition when you first saw it that it is now—in the same place?

A—I have not seen it for a good while, but I presume it is the same. It is the same. I saw it last in 1866. That is the last time I saw it.

Q—Was it the same in 1866, when you last saw it, as when you first saw it, in 1844, and down to 1852 and
126 1853?

A—In early times I didn't see it. I saw the slough between Buena Vista Lake and Tulare Lake about half way in 1866, in September. I was coming from San Francisco in a thorough brace wagon that I had bought, and when I got about half way between the two lakes—Tulare Lake and Buena Vista Lake—it was my camping time, and I thought I would water easily by turning toward the slough, and I went into the tule, damp and dry, until I got to the slough. When I got to the slough I got between two long holes of water, probably a quarter of a mile long, and a little water running between the two.
127 There I camped. I went through the tules there, probably two miles from dry land, from the main road. That was in 1866. I then came back, and took my back track on dry land, and came below Buena Vista Lake to a regular camping ground which was there. I first saw Buena Vista slough in 1858. I saw it, and I was up and along it at different times. In 1866 was about the only time that I saw the channel between the two lakes at the place about half way between the two lakes. I have seen it above; seen Buena Vista slough higher up, and crossed it at the crossing at what we called the old Tracey

128 crossing. That was a regular crossing, from here to San Emedio and to Cuyama. We crossed there on account of having so much bog here by these different sloughs. We would cross there and go round to San Emedio.

Q—Was there any change in the slough in 1858 up to the time you saw it last, in 1866?

A—No, sir; there could not be any change.

Q—The slough continued to run where it did and about the same width?

A—Yes, sir; I think if you would turn as much water in there now as there was at that time, it would run just the same as it did at that time. There is nothing, that I
129 can see, to change it. The change of 1862 took a part of the water from old Kern River. I don't know where it ran to; I didn't go down; I never went down there. New river was formed in 1868. I never went down to see where new river emptied. My age is 64; I came here with Fremont. I was his second in command. It was from one of his draughtsmen that Kern River took its name. We gave it the name of Kern River.

[No cross examination.]

130 ELISHA STEVENS,

Called as a witness for plaintiffs, testified as follows

Q—What is your age, Captain?

A—Age, sir?

Q—What is your age, sir?

A—Seventy-seven the 5th day of this month.

Q—Where do you reside?

A—You will have to talk pretty loud. I am pretty hard of hearing, especially in a tight room.

Q—Where do you reside?

A—Come a little closer if you please. When I am in
131 a tight room the sound—

Q—Where do you live?

A—I live in this county.

Q—How long have you lived in this county?

A—I think I have lived here about—I came here—the dates I cannot tell you right straight along.

Q—What year was the first year you came here?

A—When I first came here to live?

Q—What year was it?

A—The first big freshet. I don't recollect the date; the first big freshet. There has been two big freshets went

132 through. The first one that came. I will tell you a good many dates, but that date I don't know exactly.

Q—When did you first come to Kern County?

A—It was no county at all.

Q—What is now Kern County ?

A—I came here in this country—around here, along the lake—in 1845.

Q—When you first came here where did you stop ?

A—Where did I first stop ?

Q—Where did you first camp or stop ?

A—I came to the country in 1844. I brought the first emigration to California, men, women and children in
133 wagons in 1844. Fremont came in 1845.

Q—When you came here in 1844, did you come to what is now Kern County ?

A—I stopped awhile with the crowd I brought with me. I went in the spring of 1845 to Los Angeles, and in the fall, I came to this place trapping around this lake. I camped right at the head of Kern Lake, where the south fork went in right at the mouth of it. I camped where the south fork came into Kern Lake in 1845.

Q—Where did the main Kern River run when you first came here ?

134 A—The south fork run by Capt. Hudnut's, right by the settlement. That is the old river; that is the south fork. It made a little difference in the water, but the south fork ran swift and deep and narrow, and ran into the east end of Kern Lake at that time, and remained so until the freshet. The other channel that I speak of, the Hudnut Slough, ran into the slough between the two lakes. When I refer to the lakes and channel, I mean Kern Lake and Buena Vista Lake, and the slough running between them.

Q—Did you ever pass through that slough, between those lakes ?

135 A—I never crossed right in the slough; I had no occasion. There were tules and water.

Q—Did you ever pass through it in any way—through that slough ?

A—I never passed the slough in my boat. I never went clear through. I had no occasion to go around that way. I rode around frequently, and boats did go through frequently. The United States had a boat in there.

Q—Before the flood of 1862, when the waters were running down the South Fork and into the east end of the lake, and also down this way by Hudnut's, and in

136 between the two lakes, where did the water then run to?

A—It cut its way out, and went over upon the plains; entered no timber or anything else. The first freshet cut it out in places, and it went down a little. The second cut it away out, and it remained so. It ran to the foot-hills west of the slough, and ran in through the tules; ran to the foot-hills and divided up, and one part of the water went north and the other south. I myself ran up with the canoe to the mouth of New River, and then turned north with it down the river, and then came back and run up New River wlth the boat, or canoe, I called it.

137 Q—That river that you speak of running down there is what is now known as Buena Vista Slough?

A—Do you mean—

Q—You say you ran with a canoe down the river to the mouth of New River? Was that along Buena Vista Slough?

A—Yes, sir.

Q—How far did you go down?

A—I went in the canoe down that slough about fifteen miles, I think. It was deep and crooked, and not very wide. In some places it was wide and deep. I went
138 about 15 miles. There was a big drift of red wood that blocked me out with the canoe, and I could not pass at all. The tules grew up in every direction. I looked beyond, but I could not travel any further with my canoe.

Q—What year was that you went down there?

A—That is another date I can't tell, but it was after the last flood.

Q—When the water ran down through South Fork into the east end of Kern Lake, and also run down this channel by Hudnut's, between the two lakes; after that water reached the two lakes, where did it go to?

A—It went to Tulare Lake; that's where it went to.

139 Q—How did it get there?

A—I catched fish along there. It looked like fish would not come there without water. In dry weather it was not all the way, but in many freshets the water would come through and bring fish to Buena Vista Lake, but not always. There were holes of water both sides from Tulare Lake. I also trapped at the south end of Tulare Lake, where Kern River went in and made water in different sloughs. I could not run up with a canoe. There were different sloughs down there with water in them.

140 Q—Were you ever on the lower end of what is known as Buena Vista Slough, where it enters Tulare Lake?

A—Yes. I went all the way. I trapped on Tulare Lake, and then went as far as I could run my canoe, and run up the waters of Kern River and the creeks. I could not get up; they were shallow; and then I went up, perhaps, five miles, and tried to get up with the canoe, and I could not make it. The water was scattered off. The tules were large and high, and plenty of water in places, and in other places you would have to look for it. There came in some water all the time in streams, and appeared to have considerable fall.

141 Q—That was coming up from Tulare Lake?

A—Yes, sir.

Q—You came up about five miles you say?

A—Yes, sir, and had to go back. I could not get the canoe through at all.

Q—I understand you to say that you went down from this end fifteen miles below where the river enters?

A—Yes; I just judge that was about fifteen miles.

Q—Has there been any time, Captain, when the waters which ran down Kern River whether they ran through South Fork, whether they ran through Old River, or
142 whether they ran through the new channel that they didn't continue on down through Buena Vista Slough into Tulare Lake?

A—The waters in low times would not run everywhere. There were places in dry weather where it was passable in that slough, but we always could find water at some point.

Q—When it was running where would it run?

A—It would run into Tulare Lake. No other place at all. It came into Tulare Lake in small streams. There were different streams on the east side. There was a creek, pretty bold and swift, running constantly in a dry
143 season.

Cross-examination of

ELISHA STEPHENS.

Mr. GARBER—Q—Captain, I understand that you came here in 1845?

A—I came here in 1844.

Q—How old were you then?

A—It was something—I came in 1844; I am 77 now.

Q—How old were you when you came here?

144 A—It is easy to count it up. I came here in 1844.

Q—You can't recollect that? You don't recollect how old you were when you came here?

A—I don't know without counting it up now.

Q—You have forgotten it?

A—Oh, no; of course I came here in 1844.

Q—But you cannot tell without making a calculation?

A—I am 77 the 5th day of this month, and I came here in 1844.

Q—But you cannot tell me how old you were when you came here? You can't tell me that?

A—Yes, I could tell you that.

145 Q—How old were you when you came here?

A—I would have to calculate it.

Q—Well, calculate it, then.

A—Well, I suppose—54, 64, 74, and this is '81.

Q—How old were you when you came here?

A—I didn't come here to answer such questions as that. You know I can tell.

Q—How long have you been living here? Ever since? All the time in this county?

A—In this county? It was not a county when I came here.

Q—This place that now is this county?

146 A—Which?

Q—The country which now forms Kern County? Have you been living here ever since?

A—No; my place was San Jose principally, and San Diego.

Q—San Diego in California?

A—San Diego is in California, of course.

Q—How long did you live there?

A—I lived there about two years.

Q—When did you live there?

A—I don't know about the dates.

Q—I want to know about when it was?

147 A—I have been away from there. I have lived here, and then went to San Diego and came back here.

Q—You lived in San Diego, before you came to this place, did you?

A—I lived in San Diego in 1845, when I was done trapping here.

Q—When were you last down on this Buena Vista Slough around to Tulare Lake? Can you tell me that?

A—I was there when I came away; just before I came away. I don't remember the date precisely.

148 Q—Can you tell me how long since you were there?

A—Well, it has been, I expect, pretty near 8 years.

Q—About 8 years ago, you were down on that lake, you think?

A—I have not been there since the settlement. I left here and went to San Diego and came back, and I ain't been on that lake since. I ain't been there since I went to San Diego.

Q—Could you tell me about when you left San Diego, about how long ago?

A—Well, it has been near 8 years.

Q—About 8 years, since you left San Diego?

149 A—Since I went down? I don't recollect the date. It is about 8 years since I have been at that place.

Q—About 8 years ago, you were down on this Tulare Lake?

A—I was on Buena Vista Lake. On Tulare Lake, no, no.

Q—You were not down on Tulare Lake?

A—I ain't been on Tulare Lake in a good many years.

Q—About how long do you think?

A—Well, it has been some time; I trapped on it in an early day; when fur was worth something, when I first came to this country.

150 Q—Can you give me an idea about how long since you were last at Tulare Lake?

A—I think it has been at least 20 years; I could not tell the dates, but I trapped there.

Q—That was the time, was it, that you went up in a boat? How many miles was it from Tulare Lake south?

A—I don't know how far from Tulare Lake. Here is where I ran up to with the boat.

Q—It was Buena Vista Lake that you were on with the boat?

A—Yes, sir; I came out with the boat; New River cut its way to the foothills, the hills just west of the
151 mouth of New River. It filled that up and I was on Tulare Lake with my canoe and ran up stream. It ran north and then south, and it divided the water, and part of it ran north and part of it ran south; I was on Tulare Lake with my boat 20 years ago nearly, I should think. I was there with my boat and saw the water coming out of Kern River at the head of Tulare Lake at the southernmost part of it, and I went up the south part of it; I went up near five miles; I wasn't fishing, but I could catch fish.

152 Q—You run up about 5 miles in your canoe, did you, at that time?

A—About 5 miles in the slough. I was in the canoe. I went near 5 miles. I got tired and went back to my camp.

Q—Could you have gone further if you had wanted to?

A—If I had got out and waded, I could. There was plenty of water to wade, but not enough for a canoe. I could not tell what year it was, but it was trapping times when the fur was good. Some month that had an "R" in it. It was in the winter, of course, or towards
153 spring. I don't exactly recollect when I was last up on Buena Vista or Kern Lake. I think it was somewhere about 8 years ago.

Q—What was the condition of the water from Buena Vista to Kern Lake at that time? Do you recollect the state of it?

A—It was plenty, and plenty of fish—good to drink.

Q—Was the lake full at that time?

A—I don't remember whether it was full. It may have been half full.

Q—Was it full or half full? Was it high water then?

154 A—No, sir.

Q—Low water at that time?

A—Ordinary.

Q—Do you know what time of the year that was?

A—I have been there in the Winter and in the Summer.

Q—I am speaking of the last time you were there.

A—In the Spring.

Q—In the Spring of the year?

A—In the Spring of the year.

Q—What was the length of that body—of that water at that time from north to south—the body of water in
155 Buena Vista and Kern Lakes? Was it all in one sheet of water at that time, or two different lakes?

A—On the slough do you mean?

Q—Did it form one body of water or two?

A—The slough started out from the lakes—one sheet, and run but slowly. I am speaking of the slough out of Buena Vista Lake.

Q—Which way from Buena Vista Lake?

A—I should call it southwest. It runs towards Tulare Lake.

156 Q—That ain't what I am talking about. At the time you were there the last time, at Buena Vista and Kern lakes, were those two lakes separate and distinct, or did they form one sheet and body of water? I mean Kern and Buena Vista lakes.

A—One sheet of water; one sheet of water around through between the two and this stream came out and ran to Tulare Lake. I don't know how long they were. I never measured them. Going around them, it was always called 15 miles. The water was at that time slowly running down the river. It was running, but we could run up it with a canoe.

157 Q—From what point did you run up in the canoe?

A—I told you I came up the stream and then turned around. I called it the summit of the river. The river ran to the foot-hills (New River), and then divided its waters, and part went south and part north. That is what they call New River now.

Q—When was that, that you ran up New River in your canoe?

A—I told you, about 8 years ago, the last time I was down. I ran up the river about two miles, I think, near three miles up New River.

Q—From Buena Vista Slough?

158 A—I went from Buena Vista Slough up to the mouth of New River. I ran up to what I call the Summit, at the mouth of New River, about 15 miles, and then came back and ran up about 3 miles and landed on the south side.

Q—At that time where was the water that was running in New River discharging itself?

A—Some into Kern and some into Tulare Lake.

Q—Some of it was being discharged into Tulare Lake at that time?

A—Running that way. I did not go to where it stopped.

159 Q—Where was the balance of it discharging at that time—that came down New River?

A—I drank some of it.

Q—Where was the balance of it discharging itself at that time?

A—There was no other discharge—there was no other place for it to go.

Q—You say part of it ran down toward Tulare Lake?

A—I understand you. I will tell you once more. When New River cut through it ran to the foot-hills and it divided.

160 Q—Where did it divide?

A—At the mouth of New River.

Q—About how far from Buena Vista Lake did that New River divide the waters of New River?

A—I never measured that, but it is over two miles. There is a place down there that is called Baker's Dam, at the south end of Buena Vista Lake. It ain't much over two miles where the New River—

Q—There is where the waters divide?

A—That is where the waters run into the slough.

Q—Part of the waters run into Tulare Lake?

A—Yes, sir.

161 Q—Where did the other part go? Did the other part go to Buena Vista Lake? Part of it ran into Buena Vista Lake and part of it into Tulare Lake?

A—I ran up the stream with my boat. The water, I suspect, must have run south.

Q—You ran about two or three miles up the New River above the slough?

A—When I came back on the north end I went down about 15 miles, and I came back to the mouth of New River and run up about 3 miles. That was in the spring. The water was at an ordinary stage. Not as high as it is now. It was pretty near. The water was flush. I
162 don't know whether there is more water now or not. The water was just flush. It was a strong river. I was mighty tired trying to get up it.

Q—How far was Buena Vista Lake from you at the time you ran your boat up New River? Did you go down there?

A—I don't know how far it was. There was a great many sloughs ran up out of the lake, and it was just about ordinarily full. The sloughs were full all along. I have seen Buena Vista lake higher than it was on that occasion; considerably higher. Baker made a dam across it and stopped it and backed it up considerable. He
163 made that at the time he had charge of the Swamp lands; I don't know the date when Baker first began. I can't tell you I saw that dam; I have been down to it a great many times; I saw it before it was broken and after; I lived here and went down there occasionally; I can't tell how often I saw it before it was broken; I could not say how many times I have been there; it did not stand very long; the first big freshet broke it.

Q—How much higher did you ever see the water in Buena Vista Lake than it was at the time you ran with your canoe some 2 or 3 miles up the New River.

164 A—When the big freshet was here it was pretty high; I never saw it much higher than it was the time of that flood; I have seen considerably higher than it was when I went up New River; but I never measured that, I have seen it cover considerably more ground. At the time of the freshet it covered more ground than I ever saw it; the lakes were full and the sloughs were full; at the time I ran the boat up, the lake was as full as usual; at the time I went with the boat up New River, I didn't go down into Kern Lake; I came out of Buena Vista Lake and went up there.

Q—Was Buena Vista Lake and Kern Lake all one
165 connected sheet of water at the time you ran your boat up New River?

A—Of course there was a slough betwixt the two.

Q—And they were both connected as one sheet of water?

A—I never ran up the slough with my canoe.

Q—How wide was the sheet of water between Buena Vista and Kern Lake at that time?

A—A good wide slough. I rode around it, but I never was up there with the boat.

Q—About how wide was the water?

A—Considerable width. It was different widths.

166 Q—Well, at the widest?

A—There is wide places and narrow places.

Q—At the widest how wide was it?

A—I could not see plain enough through the tules.

Q—How wide was the water in Buena Vista Lake on this occasion?

A—Well, I always had no judgment about such things. It was ordinary high when I run up in my canoe, and it was very high at the time of the freshet.

Q—Did you run up in your canoe from Buena Vista clear up into New River?

A—I told you two or three times.

167 Q—Tell me again, if you please.

A—You must not be so forgetful.

Q—I want to know whether you rowed up from Buena Vista Lake on that occasion in your canoe?

A—Could I have done it?

Q—Did you do it as a matter of fact?

A—I told you I came about two miles.

Q—Did you row your canoe all the way without stopping or getting out of it from Buena Vista Lake, two or three miles into New River?

168 A—I would have been going up if I had not stopped. I told you I didn't go no higher.

Q—I want to know whether you mean to say—I simply wish to know if you mean on that occasion you rowed your boat from Buena Vista Lake up two miles above the junction of New River with the Buena Vista Slough?

A—I rode from Buena Vista Slough up to the mouth of New River and was going up stream then; and then when I came to the mouth of New River, I ran on.

Q—Up the New River or down to Buena Vista Slough?

A—In an old slough which was then running north
169 and part of it south.

Q—After you got up to the mouth of New River, do you mean to say that you went down to Buena Vista Lake with your canoe?

A—I went to New River.

Q—Then did you go to Buena Vista Lake in your canoe?

A—I went from Buena Vista Lake up to the mouth, and then went north. Then I went back to the mouth again and ran on 3 miles.

Q—Now, Captain, you say that this whole country, from the mouth of New River down to Tulare Lake, at
170 certain periods of the year would be covered with water along Buena Vista Slough in high floods from Buena Vista Lake clear down to Tulare Lake?

A—No; only in times of freshets.

Q—In the times of the high freshets I speak of?

A—No, not too high; ordinary freshets.

Q—In time of ordinary freshets the whole country from Buena Vista Lake to Tulare Lake would be one continuous sheet of water?

A—Not the whole country, but the water would run and we could catch fish.

171 Q—There would be one continuous sheet of water from Buena Vista Lake to Tulare Lake in times of ordinary freshets?

A—It was cut up with islands; it ran together of course; it was parted off and ran together again; there was one body of water that ran from Buena Vista Lake to Tulare Lake.

Q—In times of very high water there is one continuous sheet of water from Buena Vista Lake to Tulare Lake?

A—When the water staid up, there would be, of course.

172 Q—In times of very high water?

A—It would pass the water clear through.

Q—In very high water would it stand as one sheet of water from Buena Vista Lake to Tulare Lake?

A—There would be big drift logs 2 feet and 3 feet through.

Q—About how wide would the water be in that slough from Buena Vista Lake to Tulare Lake?

A—On the slough as far as I went it was crooked, and deep in some places, and as wide as this house.

Q--Did you never see it when it spread over the entire bottom for three or four miles—when the water
173 would be three or four miles wide?

A—Oh, yes; I have in lakes and then in holes—not a whole body of water.

Q—You never saw it, then, when it was one body of water and would cover the whole country?

A—In times of big freshets, in the driest season sometimes it would be very low, but there would be water all along occasionally; I have seen times when, in Buena Vista Slough, from Buena Vista Lake to Tulare Lake, the water was mighty scarce; I could not tell what year it was; the date I cannot fix; it was before the country was settled—some years ago.

174 Q—For the past ten years has there been any year when there was no water in that slough?

A—There never has been a time but what there has been water. There is always some water, running water, down at the lakes, and there would be holes. In some places you could not find water that was a sheet of water, and in some places muddy.

Q—But no running water?

A—In the dry seasons?

Q—In the dry seasons, wouldn't there be times when there was no running water at all there?

A—Low down, where the tule was very wide, it run.
175 There has been dry seasons the water didn't run much.

Q—Which way did the river run before the first freshet that you speak of—this Kern River?

A—Which way did it run?

Q—That is compared with the way it runs now.

A—The old river ran into Buena Vista Lake, what is now called the Old River.

Q—Both the Old River and southfork, when you first came here, were running streams, carrying the water of Kern River?

176 A—Yes, running streams, and went into the lake. When I came here Kern River had two branches.

Q—One running down into the eastern end of Kern Lake and the Old River running into the slough between the two lakes?

A—It had different leads after you got down; but at the foothills two regular leads that came out of the hills about where the dam was.

Q—Is this correct? When you first came here the water of Kern River came down in two branches—one called the South Fork, running into the eastern end of Kern Lake, the other called Old River, running in
177 between the lakes; am I right or not about that?

A—There was another little stream, called Panama Creek, that left the Old River and ran into Buena Vista Lake above the mouth of Old River. I don't know but what the water is running there now. It would get low when the stream is small—this Panama Creek—but it carries water.

RE-DIRECT EXAMINATION.

Q—Captain, when you were down there in what you call a canoe, and went down Buena Vista Slough and
178 then came back and went up the river, who was with you?

A—Ed. Harris—a man named Harris—no one else. He is not in this country. We were on an elk hunt. We were once down there before that, on one stream, and ran down there fishing one summer—ran down into the slough. Jackson was there when we went down in 1871. He was with me at that time, but that was not the time I had the canoe and went up. I had a canoe when Jackson was with me, and the same canoe that I had when I made the trip with Mr. Harris. Jackson was not with us at that time, but when I was down there
179 on the slough fishing.

W. W. HUDSON,

A witness for the plaintiff, being duly sworn, testifies:

I reside on Tejon Ranch, in Kern County; am 59 years old. First came to Kern County in the spring of 1859; I returned from the 35th parallel with General Beale, and I went into the Government employ as chief herder. At that time, in 1859, I didn't go down to Kern and Buena Vista Lakes; at that time I went on what is called South Fork, not far from Charlie Kerr's; that would be 12 or 13 miles south of Bakers-

180 field. I was herding the Government stock there, and camped there.

Q—What kind of a stream was that South Fork, as it was called at that time?

A—It was the main channel of Kern River; the only open main channel of Kern River at that time.

Q—Where did that channel empty itself?

A—Into Kern Lake, on the northeast end of Kern Lake. When we wanted to cross that river we had a temporary bridge made of poles, and we walked across. There were two crossings of the slough, one, perhaps about three miles this side of Charlie Kerr's,
181 and the other not far from the mill here; those were the only two places where we could ford. I was on the lakes in the spring of 1859, with Major Carleton—some time in the winter of 1859. He was exploring, and I was in the party, fishing and hunting. We passed from Kern Lake through the slough, as we termed it, to Buena Vista Lake, and returned in a boat.

Q—How wide was that slough that you passed through?

A—It varied very much in width, sir—from 100 to 150 feet, to that many yards. That was, I think, in
182 January or February.

Q—Was the water running in that slough at that time?

A—Yes, sir.

Q—Which way was the current running?

A—From Kern into Buena Vista.

Q—How many times were you on this South Fork channel, prior to the first flood in 1862?

A—I can't enumerate it, sir; I went out of the employment of the Government into the employment of General Beale, and the care of the stock called my attention there repeatedly; sometimes once a week,
183 sometimes once a month; I cannot say particularly; when I was not engaged in driving stock it was my business to go around and see to, attend to the stock around the borders of the lake and around the slough and on the island here, whenever it became necessary. I could not enumerate the times; I was there repeatedly between the years 1859 and 1862.

Q—What effect did the flood in 1862, have upon the waters of the South Fork channel?

A—Very little. The waters separated, and a portion of them ran through what was called Old River,

184 into Buena Vista Slough. What I mean by Buena Vista Slough, is the slough between Kern Lake and Buena Vista Lake.

Q—After that division and before, when the water was running through South Fork, or South Fork and Old River, where would the water then continue on to?

A—It continued on to what is called Buena Vista Slough.

Q—And from there?

A—And from there to Tulare Lake, down through Buena Vista Slough.

Q—When were you first on Buena Vista Slough that
185 you speak of, running out of Buena Vista Lake?

A—I think I was there, sir, in 1859, and perhaps in in 1860, or 1861. I know I was there in 1861. I can't remember when I was there last, in 1872, or 1873.

Q—Was there any change in that slough, between the time you first went there in 1859, and the time you were last there in 1872, or 1873?

A—No material change.

Q—The channel is the same now as it was then?

A—Yes, sir. I drove a great deal of stock through there from 1862 to 1872 or 3. I think I made my last trips, perhaps in 1872. In driving stock you drive it
186 on the west side of Buena Vista Lake, and thence on the west side of Buena Vista Slough to Tulare Lake, and on the west side of Tulare Lake, to what is known as Fish Slough, or the outlet of Tulare Lake. Thence down the San Joaquin to Pacheco Pass, and by Gilroy to San Jose.

Q—Then in driving from Buena Vista Lake, to Tulare Lake, you would follow that slough?

A—Yes, we followed the slough, in order to get water and camp. In following that slough we found water all the way down through always. The water
187 would be lower in dry seasons. You know the extremes in California. In flood there is an immense quantity of water. The slough appears to confine itself to the high ground on the south-west side, there was more alkali and more sand, and the water cut more of a channel there. In high water it overflowed; I don't know to what extent. In high water it would overflow, all of the swamp and overflowed lands. It was in 1864, that I went through the slough between Kern and Buena Vista Lake and reversed it. I was in company with General Beale, and Robert S. Baker.

Q—How many times between 1859-60 and 1873 did

188 you go from Buena Vista Lake down Buena Vista Slough to Tulare Lake?

A—I could not enumerate that, sir. I drove a great deal of stock, sometimes once and sometimes as often as three times a year from 1862 to 1872.

Q—You drove along Buena Vista Slough from Buena Vista Lake down to Tulare Lake?

A—To Tulare Lake.

Q—Did you always find a slough there when you went down?

A—Yes sir.

Q—And you always found water?

189 A—Always found water for camping purposes; sometimes it would be lower than others.

Q—How was it about finding a running stream there usually or not?

A—Well, sir, there was a current. It was very gentle in places, where the slough had cut down and was narrower, there was considerable current, where it had been spread out and the tules had grown up and it was dead water, or comparatively so—yet there was a current. I last saw Buena Vista Slough between Buena Vista Lake and Tulare Lake in 1873, I think,

190 Q—When you saw it last, was the general course of that slough, the water running through the same channel as it was when you first saw it?

A—Yes sir.

Q—There was no change?

A—No sir. No material change. The water was at the same points.

Q—In speaking of Buena Vista Slough, I understand you refer to the slough which leaves Buena Vista Lake here and crossed down through this swamp land?

A—That is Buena Vista Slough from Kern to Buena Vista Lake.

191 Q—You do not refer to that slough [indicating a slough on the map] when you speak of Buena Vista Slough?

A—No sir.

Q—Are the positions of the lakes and sloughs respectively, on this map correctly delineated, according to your idea of the country? [The witness is shown Map No. 1 to identify it.]

A—Yes sir.

Q—Is the position of the slough from Buena Vista to Tulare Lake correctly delineated there, and the swamp lands?

192 A—Yes, sir, I think it is.

Q—And this channel between the lakes, which runs through, connecting the west end of Kern Lake with the east end of Buena Vista Lake?

A—That is correct, according to my recollection of it.

Q—I don't suppose it is as straight as that?

A—It is very straight, sir.

CROSS-EXAMINATION.

By Mr. GARBER—I have been here twenty-one years, since 1860. During the last years I have not been so familiar with the country. From 1859 to 1880 I was
193 familiar with this stream of water in this country.

Q—And your business during that time took you through this country along the Buena Vista and Kern Lakes and Tulare Lake a good deal?

A—From '62 to '72, consecutively.

Q—About ten years?

A—Yes, sir. For eight years I ain't seen the slough so frequently.

Q—But still sometimes?

A—Sometimes.

Q—From 1862 to 1872 how often did you pass along
194 from Kern Lake to Buena Vista Lake?

A—Four times, that is, through the slough; twice through, and then recrossed it. From 1862 to 1872 I have not been through it. I have only passed on the borders of the lake. I frequently passed along the borders of the lake during that period; from once to three times a year, perhaps, or more frequently. In reversing my trips it would be as much as six times a year frequently; I mean from 1862 to 1872.

Q—During that period, from '62 to '72, did you observe any change whatever in the current of that water, or the appearance of it, in that swamp land country,
195 from Kern Lake to Buena Vista Lake?

A—No material change, sir, that I remember. I found water in the usual places, sometimes more, sometimes less.

Q—You noticed no change during that period of time in the way in which that water ran through those lakes in that part of the country?

A—Not as I know of, sir.

Q—During that time there seemed a current, as there always had been?

A—No, sir. It was owing to the season. There is more or less current.

196 Q—But one season with another, during those ten years, it was always about the same?

A—As well as my memory serves me, it was.

Q—Which way was the current?

A—Towards Tulare Lake, and from Kern Lake to Buena Vista Lake, as near as I recollect.

Q—Was it a pretty strong current from Kern Lake to Buena Vista Lake?

A—No, sir, that was not a strong current; perhaps from half a mile to a mile per hour. It might have been less or more; I could not say.

Q—What would be the width of the sheet of water
197 between Kern Lake and Buena Vista Lake?

A.—When I passed it, they approximated it at the nearest point 150 feet; that is, the sheet of water which connects Kern Lake and Buena Vista Lake; from 150 feet to halt a mile in width.

Q—What was the widest you ever saw that sheet of water; the connection between Kern and Buena Vista Lakes?

A—It was a solid sheet of water from there to Tulare Lake in 1866 and '67. The country was six feet under water in the immense overflow of 1866–7.

Q—I am speaking of the country from Buena Vista
198 Lake to Kern Lake. I do not speak of Tulare Lake, or that part of the slough below Buena Vista Lake.

A—All the country was overflowed in 1862, but the flood was not so great or extensive as it was in 1866 or 1867. In 1862 there was one solid sheet of water from Kern Lake to Tulare Lake. I could not say how wide it was. It went to the high lands.

Q—Could you give me some idea of the various widths of that sheet of water from Tulare Lake up to Kern Lakes?

A—Including the lakes?

Q—No, leaving out the lakes. In between the lakes,
199 along on Buena Vista Slough, and also on this connecting slough between the lakes. It would be several miles wide, wouldn't it, that is, on Buena Vista Slough?

A—Yes, sir. I could not tell how deep the water was in the slough, varying, I suppose, from one to ten feet. I was down near Tulare Lake during the flood. I can give you no idea how deep the water was down four or five miles south of Tulare Lake; I think there was a very deep sheet of water standing down there.

Q—Was there any current in the sheet of water at that time, along from Buena Vista Lake to Tulare Lake at the height of the flood?

200 A—Yes, sir. There was a current clear into the San Joaquin at that time.

Q—Clear through Tulare Lake into the San Joaquin River?

A—Water which came through Buena Vista Slough from Kern Lake into ——

Q—First from Kern Lake into Buena Vista Lake?

A—Yes, sir. Then down through Buena Vista Lake and through Tulare Lake, and into the San Joaquin River, through what we call Fish Slough. I think there was a continuous current in the height of the flood of 1862, from Kern Lake clear down to the San
201 Joaquin River.

Q—Wasn't there any part of it that stood still? "Dead water," as you call it?

A—Yes, sir. A good deal of it stood still. I presume during that time there was a current through Tulare Lake. There was a great deal more water in the flood of 1866 than there was in the flood of 1862.

Q—How would the height of the water in the height of the flood of '62 in Buena Vista Lake, compare with the height of the water in Kern Lake? Were they not about the same level, or was there a current right through?

202 A—There must have been a current right through, or the water wouldn't have run into the San Joaquin.

Q—About how long was that sheet of water, including Buena Vista and Kern Lakes at that time, at the height of that flood, this sheet of water from Kern Lake into Buena Vista Lake, including both, not including any part of Buena Vista Slough—some 24 miles?

A—More than that; some 40 or 50 miles, that is, from the extreme point of Kern Lake to the extreme point of Buena Vista Lake.

Q—How wide was that sheet of water at that time,
203 in the high flood of 1866?

A—It was immense, sir; it was over to the high ground on the north, and moved towards Buena Vista Slough and the sinks of Poso Creek. I could not say how wide.

Q—Well, now, in the various years after 1867, did you notice any change in the waters of this country through here?

A—Not after they retired, further than the change from the South Fork into what we call the Old River. The change took place, I think, into Old River in 1866

204 or 1867, and it continued to run there, I think, about a year. That would be 1868. It runs there yet, or in the several ditches that have been taken out of New River. I think it was in 1868 that it commenced to run in New River, but I don't remember. I have never been down on New River. I don't know anything about that.

Q—Did you say that in every season from 1866 to the present time, this Buena Vista Slough has always had water in it from Buena Vista Lake to Tulare Lake.

A—No, sir, from 1862 to 1872, I said.

Q—From '66 down to the present time has this
205 Buena Vista Slough—

A—I have not been so familiar with it.

Q—Well, until '80; were you not there at intervals up to '80?

A—Yes. I found water, but paid no attention. I found water to use at a good many places. I have not been there so frequently since then. I was there frequently until 1868, and I found water, but paid no attention to it. I found water to use at a great many different places.

Q—And you never noticed any difference in it, did you, up to 1880, from what it always had been?

206 A—I think I have, sir.

Q—What difference did you find?

A—Less water.

Q—When did you first notice less water there?

A—I could not fix the date, sir. Sometime between 1872 and 1880. I don't remember.

Q—Well, now, prior to 1872, did you always find water running in this Buena Vista Slough, or would there be times when there was no running water prior to 1872?

A—I could not be positive about that, because my
207 attention was not called to that particular point. I passed there frequently prior to 1872, and I found plenty of water at the usual watering places, and it appeared to be about the same hight, and consequently I came to the conclusion in my own mind, that the same amount of water was there.

Q—Well, did you always find running water there, or did you go by there when there was no running water, but simply pools standing there?

A—Well, very frequently we didn't go to the slough only at intervals. We knew where the hard ground was, and went to those places to water our stock.

208 Q—Was there any time prior to 1872, in all your travels through there, that you found this slough in such a condition that there was no running water at any point, but simply standing ponds, with no connection from one to another?

A—I don't remember finding it that way.

Q—It was always, when you were there, running water?

A—At certain points.

Q—Wherever you were?

A—No, not where I was, but at different points. We would frequently leave the stock and ride into the
209 slough in order to find a good place to water.

Q—And you always found running water?

A—I think so, as well as my memory serves me. I also found stagnant pools.

Q—And you always found running water every time you were there, did you?

A—Yes, sir. Not the whole way. At different points.

Q—Well, Captain, what time of the year is it that the water is highest through that slough, as a rule?

A—Generally from January to June.

Q—Well, during that period of each year, was there
210 always a great deal of water in Buena Vista Slough every year that you were there?

A—When there was not a drought, sir.

Q—Well, what year was there that there was a drought, that you recollect?

A—I can't enumerate them.

Q—How many of them were there, that you remember?

A—In 1863-4 we had a very severe drought.

Q—Was there any water in that slough then?

A—Yes, sir.

Q—How much in the lakes, Buena Vista and Kern
211 lakes, at that time?

A—About the usual quantity.

Q—They were full?

A—They have varied very little in the 21 years that I have been acquainted with them.

Q—They are always full, whether the year is dry or not?

A—There is always a sufficiency of water from the snows and Kern River to supply these lakes, They filled up usually, before the ditches were taken out, and the absorption by evaporation and irrigation. I

212 don't think they have varied more than two feet.

Q—Leaving out these years of drought, do you say that there was always a large body of water in Buena Vista Slough every year when you passed there from January to June, when it was highest—when the water was highest? I speak of the time in the year when the water was highest, with the exception of these years which you say were dry years. Was there always a large body of water every year in the slough?

A—Sufficiently large to prevent our crossing it with stock.

Q—It was generally several miles wide at some por-
213 tions of the year when the water was highest, or after it had been highest?

A—Yes, sir.

Q—Generally several miles a sheet of water?

A—No; the tules grew up 8 or 10 feet high, and the water flows through.

Q—Leaving out the exceptional years that you speak of as dry years, it covered all the swamp and overflowed land, every year, didn't it?

A—I presume it did. The water would be from a few inches to several feet deep, owing to the undulations of the soil. In some places 10 feet, and in some
214 places more, owing to the undulations of the soil.

RE-DIRECT-EXAMINATION.

To Mr. HOUGHTON. I fixed the last flood in my mind as having taken place in 1866 and '67. It may have been in 1867-68; I am not positive. We did not have floods two years in succession. I went through this slough between Kern and Buena Vista Lake in a boat two different times in the winter of 1859, with Major Carlton, and in the spring or winter, I am not positive which, of 1864, with General Beale, and both
215 times when I passed through, the waters of Kern River were running into the lake through South Fork and Old River. It was before the change into New River, and at that time I found the current running from Kern Lake into Buena Vista Lake each time, and quite a strong current.

RE-CROSS-EXAMINATION.

Mr. GARBER. Q—You always found a current when you passed around the edge of that lake in running from Kern to Buena Vista Lake?

216 A—A current in the lake, sir?

Q—Did you say that always when you passed around the edge of those two lakes or by those two lakes, that you found a current from Kern to Buena Vista?

A—There was always a current, or the water would not have found its way to Buena Vista Slough.

Q—Didn't you tell me that that was always so when you were in the lake in a boat, or around the edges of it?

A—Yes, sir; that was my impression.

SOLOMON FRIED,

217 Called as a witness for plaintiff, sworn, testified:

I reside in Havilah, in Kern County. I am 46 years old. I came to what is now Kern County in 1859. I first located on the sout side of Kern Lake. I had hogs down there, taking care of them. I don't remember exactly how long I remained there in that one place, but at the lake, and on the slough between the two lakes, I rema ned until the spring of 1862. I tnen moved up here at the upper end of Bakersfield, where Mrs. Tracey now lives.

Q—When you were on the lakes in 1859, on Kern Lake,
218 and afterwards came up on what you call the slough in 1850, where did the main channel of Kern River run?

A—The largest channel I found was over near the south fork of Kern River, or the south prong, and that continued until the winter of 1861–2. It ran along the south fork and into Kern Lake, I believe, at the extreme northeast corner up to 1862. That was a very deep channel most of the time, and ran very sluggish. I don't think there was any crossing to it, or any chance of crossing it, except in the summer time. We had a bridge across it. There may have been more than one, but I don't remember. I crossed on that bridge several times,
219 and swimming my horse several times. If I didn't cross on the bridge I had to swim. The greater body of the water ran down that south prong; it ran down in three different channels. There was one out here which we always called the slough, but the water seldom ever got through there, except in high water, as far as the lake. The other one run into the lake—the west prong. No, it ran into a channel between Kern Lake and Buena Vista Lake. I can't say that was what was afterwards called Old River, because I have not been down there, and I don't know the different places. I don't know what names

220 they are called by now. The last time that I crossed the channel that entered into the connecting slough between the lakes, I believe, was last October; a year ago. I was down there I left Bakersfield in October, 1863, and went out to the mountains, and ever since I have been away. I have wintered here one or two winters since.

Q—When the water of Kern River ran into Kern Lake through south fork, and into the connecting channel between the two lakes, where did it continue to?

A—Into Buena Vista Lake.

Q—And from Buena Vista Lake where did it run to?

A—It started out in a large sluggish slough from
221 there.

Q—In what direction?

A—Ran northwest.

Q—Do you know what they call that slough—that stream that ran out there?

A—Buena Vista Slough. I have been on that slough about six or seven miles below the lake. That is all.

Q—And that continues all of the way through a large slough through there?

A—Well, whenever I could get to it to see it was. It was a large, deep, sluggish slough as far down as I could
222 get into it. There was places where there was marsh and tules, so it was impossible for a man to get into the main channel of the water. When I went along those seven miles I believe I was on horseback and on foot. I was hunting for elk. I was going on the land.

Q—Did you ever go through the channel that connects, or did connect, Kern Lake and Buena Vista Lake?

A—I have never been all the way through, but I have been on the greater portion of the channel. I went on a tule raft. That was in 1860 or 1861. There was a sluggish current in it running into Buena Vista Lake. I was not here at the time of the flood of 1861–2. I went out
223 to Fort Tejon with a drove of hogs, and while I was gone out there before I returned the waters came.

Q—What change did the flood make in the running of water in Kern River?

A—It changed it clear off entirely away from where it ran before.

Q—Did it leave a portion of the water still in the south fork?

A—No, sir.

Q—The flood of '62?

224 A—January, '62, I think it was, if I remember the month right.

Q—When did you go away from here, Mr. Fried?

A—I left here in October, 1863. After the flood and before I left here in the summer of 1862 I lived just above Bakersfield where Mrs. Tracey now lives, between the south fork and the middle fork. Before I left here there was a good supply of water running down there. After the flood there was no water running down there. It turned the water all away, and we went up and turned it back, myself and others, and then it continued to run down through the new channels. I was down on Kern
225 Lake after that flood. I don't remember that I went around to Buena Vista or not. I don't think I did.

Q—How many times have you been on Buena Vista Slough that runs out of Buena Vista Lake?

A—I could not tell. I am sure I camped right there on the slough. Stopped there with a man that was a friend of mine that was camping there taking care of hogs. I was down there several days hunting, and in coming up into the island I would often come up that way to see him, and then come up on a visit to the island. I suppose I have been there it may have been a half a
226 dozen times. I was first on Buena Vista Slough in 1860. I think the last time I saw it was in the fall of 1861. I was crossing from there in 1860 up to 1861, until the fall of 1861.

Q—When you were on the Buena Vista Slough and knew it, was there a current there?

A—Yes, sir; it was running northwest. The current in the slough was runing northwest.

CROSS-EXAMINATION.

By Mr. HAGGIN—The flood of 1861–2 closed up the
227 south fork and shut off the water from running down that fork.

Q—And you went up there with others and opened up the channel again?

A—We opened another channel. The object was to get water down here for irrigating purposes, to irrigate on the south side of Bakersfield, and in several places along in there—places in the immediate vicinity of Bakersfield. We made a canal or ditch, whatever you may term it, about 6 or 7 feet wide, and about 2½ or 3 feet deep. We used the water turned in there for irri-

228 gating, and when we didn't do that we turned it out into different sloughs.

Q—Was that ditch as large as the south fork was before?

A—No, sir. The ditch that we made to turn the water back into south fork, where we turned it back into the south fork, was about—I forget the distance that we cut out there; and then we could run it into the old south fork channel quite a ways before we started this ditch that came in here. The ditch that we cut up at the river was some 18 or 20 feet wide, probably 18 feet wide, and we had to cut that down near to 6 feet, prob-
229 ably 7 feet. When we got that dug, we had a current of water in it that a man could scarcely stand up in it. It often knocked us off our feet. I would think about three feet of water, and a current sufficient that we had to be careful and keep from being knocked off our feet. It was not all used for irrigation purposes. We let a great portion of that water run on down the south fork, and a great portion of it went down into the lake. There were settlers down on the south fork at that time. They used it when they liked. There was several ditches that were taken out before it changed, and several rebuilt
230 their ditches and used the water, and there was several that gave up their places and left.

Q—When the water left the old south fork dry, in 1861-2—that winter—what course did the water take—what became of the water?

A—It changed off on to the north side. I don't know where it went to. I never followed it down to see, to know whether it went into Buena Vista Slough or the lake, or where, I don't know.

HENRY BOHNA,

231 Called as a witness for plaintiffs, sworn, testified:

To Mr. HOUGHTON—I reside on Gordon Gulch, Kern county. I came to Kern county in 1860. I was then 18 years old. I then settled here, on the upper end of Bakersfield. My father settled the place that Mrs. Tracy now lives on.

Q—When you came here at that time where did the Kern River run after going around the bluffs.

A—After it passed the bluff about the point of the mountain there was one stream went south and the other north. It forked there and divided. I think the south

232 fork was the larger; that is, I think it had the capacity of carrying more water than the north fork, and perhaps there was more water in it at that time. The south fork was a deep, narrow, sluggish stream—a deep, narrow stream. I crossed the stream when I came in here. I think we called it 8 or 9 miles below here; on a little bridge—a temporary bridge. We crossed it as we came in. I think that stream emptied its waters into Kern Lake, at the east end of the lake—northeast, perhaps—but about the east end of the lake. I don't know exactly where the other branch did empty its waters. I never followed that down. The south fork continued to carry
233 the main body of the water until January, 1862.

Q—What took place then to make a change, if anything?

A—There was high water; driftwood came down and lodged above the fork of the stream there, above the head of the stream, and it filled in with sand and driftwood, and turned the main channel of Kern River out still north of what we called the north fork at that time. It was difficult to ford the south fork before this change took place. I don't remember ever having forded it. In crossing with a horse or wagon I always went to the bridge I speak of,
234 some 8 or nine miles below. I had crossed that stream about a mile from where we lived, on a foot-bridge, a pole or a log—something of that kind that had been erected for a crossing. I never crossed with animals of any kind. I left here in the latter part of January, 1862, immediately after the flood; just as soon after the flood as I could get away. I have been living most of the time in Gordon Gulch in this county.

[No cross-examination.]

S. W. Woodey,

235 Called as a witness for plaintiffs, sworn, testified:

Mr. Houghton—Q—When did you come to what is now known as Kern County?

A—I came here in the fall of 1860. I settled at a place here, I think, was known as the Allen Rose place, right opposite the Tibbett place. That is in nearly a southerly direction, a little west of south of Bakersfield, something like a mile, or a mile and a half, perhaps. I came here in 1860, about Christmas, or the first of January. I could not say positively. I settled there. I

236 came in the fall from Visalia, and examined the country, and went back, and then returned somewhere near Christmas, when I located here.

Q—Do you know where the main channel of Kern River ran after it turned the bluffs up here, at the time you came here?

A—Well, I don't know that I can say the capacity of the southern branch was greater. It would carry more water. There is no doubt of that, but to say which carried the most water I could not say. I never traced the southern branch down. It ran in a southerly direction; it ran east of where I lived, and east of where we are
237 now. It ran southerly, and that would be towards Kern Lake. I never followed it down further than the bridge, 9 or 10 miles. I have been on the river nearly all the way down to the old bridge. I have crossed there.

Q—What kind of a stream was it at that point?

A—It was near what is known now as Mr. Souther's ranch—somewhere near—not far from there; it was near there. I left a few weeks after the freshet, and did not return for a number of years, and didn't go down there until after it was settled. That bridge was near there. I left here in February, 1862, just after the freshet; as soon as I could get away, I left.

238 Q—What change did that freshet make in the course of the river?

A—It made a material change. It carried nearly all the water north of us, burst it through and made what we call the New River, across which the county bridge now stands. We called that then the New River.

Q—Is that stream what is now called Old River?

A—I could not say. We called this the south fork, and the north fork ran between here and Captain Hudnot's, and we called that the north fork then, and the stream that was made by the flood of 1862 we called the
239 New River. I could not say whether that is called the New River now or not.

[No cross-examination.]

SOLOMON JEWETT,

Called as a witness for plaintiffs, sworn, testified:

To Mr. HOUGHTON—I reside in Bakersfield. I have lived in what is now Kern county twenty years. I first came in October, 1860. I located at Tejon ranch, which is about thirty miles from here, where I first came

240 to Kern River, in August, 1861; at the Rio Bravo ranch, twelve miles above here.

Q—Did you at that time come down lower on the river, to where this place at Bakersfield is now?

A—I brought stock on the river in 1869, and afterwards drove up from the Tejon ranch.

Q—Where was the main channel of Kern River at that time. after the river passed the bluffs?

A—At that time I didn't know that there was more than one channel. That was the one I came up. I followed up the stream at that time.

Q—Is that the channel now known as south fork?

241 A—Yes, sir.

Q—Where did the water in that channel, if you know, run to?

A—Run towards Kern Lake. I was down about ten miles from here, drove into Tejon, and followed it up to the south to this point. That channel ran pretty near due south from here, I should judge.

Q—You say that you didn't know there was no channel then. When did you learn that there was another channel to this river?

A—In 1862, before the flood.

242 Q—What other channel before 1862 was there that the waters of Kern River ran through?

A—There was a channel called the north fork, running near the place where I now reside. The waters in that channel run down then west, and I followed that, perhaps, three or four miles. It ran towards Buena Vista Lake. I didn't learn until afterwards where they ran. At that time I followed it down here—this side of the Anderson ranch. They ran this side of where the Anderson ranch is now. I didn't know where that channel emptied at that time.

Q—There was a flood here, in 1862. What change, if

243 any, did that make in the river's course?

A—It turned the river further to the north—the main channel.

Q—After 1862 where was the main channel of Kern River?

A—That was what was called New River—what we called New River.

Q—What is it called now?

A—Old River.

Q—Can you show that channel which was formed by the flood of 1862 in this map—map No. 1?

244 A—I think so. It is the channel marked on map No. 1 as Old River.

Q—After the break and the water ran into that new river, how did that leave the south fork?

A—That took a great portion away from the south fork. There was some water left in it until 1868.

Q—How long did the main body of water continue to run in what you called Old River then?

A—Until 1868. The flood of 1868 dammed up what is called south fork now, and the north fork changed to still farther north. It changed the waters to what is
245 called New River at the present time.

Q—Has there been any change in the course of Kern River since 1868?

A—No, sir; nothing of any consequence.

Q—After the change of 1868 threw the waters into New River, where did that water continue to run to?

A—A portion that ran into—well, after the change of that river I was on it but once—a great part of it ran towards Kern Lake, and the other ran to the right, towards Buena Vista Lake; a portion of it to the right into the tules, or into the old slough.

Q—Then, where did New River empty its waters? After
246 the change, you say that the south fork emptied into the north end of Kern Lake, and that Old River emptied into Kern Lake or down that way. Now, where did New River empty its waters?

A—I never followed to the end of it. I think it generally emptied into Buena Vista Lake. I never followed that down. I crossed the lake at the point of it several times. I think it emptied into the right, below or near the Baker dam.

Q—Have you ever been on Buena Vista Slough that runs out of Buena Vista Lake?

A—The far end of it?

247 Q—Yes, sir?

A—Yes, sir.

Q—When were you there first?

A—I was first in January, 1862, and crossed it. It was then a sluggish, deep stream. I have been there since various times—three or four. The last time I was there was two years ago. I didn't cross it then at the same place. The last time I crossed it on the bridge. The water was running into a canal below where I crossed there—some water.

Q—The channel is in the same place now, is it not?

248 A—Yes; the channel is in the same place.

Q—Do you know where the waters of Kern River empty?

A—They empty right in at the bridge below the lake, into Buena Vista Slough. At the time I was there, there was a dam there. That was two years ago. Some was running over the dam to the left, and some was going to the right, if I recollect. Most of the water was going to the right. There was a dam under the bridge at that time—a gate. I speak of the spring of 1879. That which ran to the right would go down along into the tules. I never followed it down—down into Buena
249 Vista Slough; and that which was running to the left, I judge, would go back into the lake again, the way it was running.

Q—When the waters of Kern River were running in through south fork into the east end of Kern Lake and into the Old River in between the lakes, where would these waters go?

A—They would go through Buena Vista Lake and into Buena Vista Slough.

Q—And from there?

A—From there toward Tulare Lake. When the water
250 was high enough, I understand, it ran into Tulare Lake.

Q—Have you ever followed Buena Vista Slough from where it leaves Buena Vista Lake, down to Tulare Lake?

A—No, sir; not that far. I followed it down twice, about opposite Templor. That would be 20 miles. That was in 1863–4 and 5. I was driving stock in there. I don't recollect about the condition, whether it was an open slough or not. The first three or four miles I followed, there was a running stream. After that I was sometimes away from it. But sometimes up to it, watering stock there.

251 Q—At the slough?

A—There in the slough. Whether there was water in the slough, or stagnant water, I could not say. There was water going over the tules. That was in February. I was there in 1862–3–4 and 5.

Q—Did you during either of those years when down there go to any place on the slough where it was dry?

A—No, sir—always water wherever we touched it.

Cross-Examination of

SOLOMON JEWETT.

By Mr. HAGGIN. Q—You said that about 1862 the

252 water changed its course from the South Fork and went down towards what is now called Old River, that at that time you did not know exactly what became of it, but you have seen it since. When did you subsequently see that water down Old River—what is now called Old River?

A—I crossed that Old River at various times in 1863, 4, and 5, down where Mr. O'Hara used to live. It was below the Anderson Ranch. The Anderson Ranch is on Section 34, Township 29, South Range 27 East, where the river turns off southward, I never followed it down, only about three miles below there.

253 From there it continued in its southward course towards the lakes. In the spring of 1868 the new channel was opened, or what is known as New River. After that water continued to run in Old River. I should judge half of it after that run in Old River from that time on.

Q.—When the water reached Buena Vista Slough, what became of those waters?

A—Spread out over the tules.

Q—Which way would it run?

A—Towards Tulare Lake.

Q—All?

254 A—Some of the waters, I understand ran into Kern Lake. I was there once after that and they appeared to divide—a part went to the left and a part to the right. I think that was previous to the New River being formed.

Q—How could it have run to Buena Vista Slough then? Was there any channel leading down except New River to, or towards Buena Vista Slough?

A—No, sir. Old River ran in down somewhere into the lake. I was down at the mouth of New River two years ago, and I was there before at the time that the bridge was located—the bridge that the county built.

255 The one there now is perhaps in the same place. I can't fix the section. It was near Cole's ranch. That bridge was broken by the water—the waters of New River. The waters must have been running towards Buena Vista Lake. They were seeking to go into Buena Vista Lake, and my understanding is that the rush of water broke the bridge. I was down there in 1878. I think the waters were going the same way. I think some of it was going past the bridge and some of it—there was a drop in the bridge, and some was passing over it and some to the left into

256 the lake and some to the right into the slough. I know the water was passing over the drop in the bridge. Mr. Wible was there fixing it with brush. I mean by drop—there were boards under the bridge to keep the water from passing to the left. The water was to the right and the boards were to keep it back. It passed over the boards and under the bridge to the left. That drop was put there to keep the waters from going into Buena Vista Lake. I think the intention was to run it down into the new canal, the canal running down towards Tulare Lake from the bridge. Mr. Wible located 2 or 3 miles below the bridge. The
257 purpose of the drops was to turn the water into the canal and prevent it from getting into the lake.

Q—Suppose that dam—that drop in the bridge had not been there, what would have become of the waters?

A—They would have run into the lakes—Buena Vista Lake and Kern Lake, until they were full and then ran back again. If that drop had remained open the waters of New River would have run into the lakes, and would have ran back again after they got full; after they got full the waters would naturally pass northward. I have been northward on Buena Vista Slough about 20 miles. I passed by some portions
258 of Buena Vista Lake, when I went that way. It was full of water. The water was flowing into the lakes then.

Q—It ran off, you say, when they were full, northward?

A—There was a running stream through the slough at that time.

Q—At what time of the year was that?

A—I usually started in February—about the 20th of February. I was there in 1862–3–4 and 5, driving stock to San Francisco. I have not been there since New River was formed. I went down that canal about
259 opposite Templor; I mean the canal built by Miller & Lux, and Livermore; I mean the canal that flows on the west side of the Swamp Land District, and is marked on that map there, and which is at about the southermost end of that body of swamp land. I think there was a little water running down the canal, but I don't know how much. There had been some breaks in the canal a short time before, and I think there was nothing more than a little seepage water in there. That was in 1879, in the fall of the year, I should judge. I was going over where I was at work at the

260 oil wells; whether it was 1878 or 1879 I could not say; it was while we were at work at the oil wells over there; I could fix the time by going to my books; I think it was in 1878, in the fall; it was the fall soon after they opened their big canal, and the water running through it broke it in several places; there was a little seepage water running in there. At that time we did not pass near Buena Vista Lake; we crossed the bridge at Cole's camp at that time; I didn't go near the lakes; I don't know whether they were full or not. There was water there at the bridge, it was running; the drops under the bridge were closed, with the exception of
261 places where the water was going over them, but not sufficient to permit all the water to run through; the water that did run over went into Buena Vista Lake, and the other was forced northward. That was in the fall of 1878; I was also there in the spring of that year, and it was in the spring that the water was running over the dam, in the spring of 1878, not the fall, I don't think it was; it was in the fall that I saw that little water in the canal. When I went there in the spring I crossed the bridge and went immediately in the hills and did not see the canal.

Q—You said that in 1863, 1864 and 1865, about that
262 time, you were more or less along Buena Vista Slough —that which is marked on the map as Buena Vista Slough. What was the general condition of that country in regard to water?

A—At that time there was short grass on the outside of the sloughs, and inside there were high tules.

Q—Did you find much water through there?

A—We had water for camping purposes. It seemed to me that the water came in from the tules to the outside.

Q—Did you find any running stream of water?

A—I don't recollect any after leaving the point of
263 hills somewhere near the bridge.

Q—Did you find anything to indicate there a flowing stream of water?

A—I could not say.

Q—Or water with a current?

A—Not after leaving 3 or 4 miles below Buena Vista Lake, I could not say that I saw a flowing stream.

Q—How long would this condition of the water in the tules about the outside remain? How long did the water remain there?

A—I could not say.

264 Q—You are familiar with the conditions of this country, relative to the flow of water, are you not? the time of the year that the water does flow here, that is, the amount of water generally in the river at different times of the year, are you not?

A—Yes, sir.

Q—What times of the year is there the most water?

A—Usually in January, about Christmas.

Q—Is there as much in the spring time?

A—After that we have what is called the summer rise, along in May or June. We generally had a winter rise, with more water than at any other time. It
265 don't last long. The largest rise is in the winter. That goes off rapidly. Then in the spring the water comes again, that is, considerable rise.

Q—You state that you were down there in the spring time of the year, mostly. That was the time of the year when there was most water flowing down from the mountains? I don't mean the highest water, but that there was a great volume of water at that time?

A—Yes, sir. I never visited that country in a dry season, except this once; two years ago, in 1878, I went down. That was in the fall of the year.

Q—When were you at the mouth of Buena Vista
266 Lake in the fall of the year?

A—What year?

Q—In 1865-6. What was the condition of the water in the lake then?

A—In 1865 it was dammed up by the Baker Dam. I don't know how long that lasted; not any great length of time—a year or two. I was there in 1866, and the Baker Dam was there. The water was flowing around the dam. We crossed the bridge on some boards at that time. I think it broke in about three days afterwards. This dam raised the water up in the lakes until it flowed round the dam. I heard somebody cut it.
267 The water was flowing around it and soon went down.

Re-direct examination of
SOLOMON JEWETT.

Mr. HOUGHTON. Q—You say that the waters from Kern River would run into Buena Vista Lake until it filled the lakes up; then it would run out again? When it ran out again, where would the water run?

A—Run down Buena Vista Slough into Tulare Lake.

Q—Is that true of the lakes ever since you have known them, that they filled with water and then the

268 water that escaped from them runs down Buena Vista Slough?

A—As I understand it. The bridge that I refer to down on Buena Vista Slough was a bridge built by the county, and afterwards rebuilt by Souther. It was on Buena Vista Slough and near Cole's. When I went there in 1865, the Baker Dam kept the water back. In 1866—I judge it was in 1866—the dam washed out, though I am not certain of the date. When I went down along Buena Vista Slough for 20 miles, I stopped along on the margin and found feed on the outside, and tules on the inside.

269 Q—You were asked by counsel on the other side, how long that condition of things would last. Would it not depend a great deal upon the fact whether the waters of Kern River were permitted to flow down the the river, or whether they were appropriated above, as to how long that would last?

A—Yes, sir.

Q—If the waters were appropriated above and taken from Kern River, what would be the effect on the country down there in the swamp land district?

A—It would be apt to dry up the tules. It would make dry land instead of swamp land. It would re-
270 claim it.

Q—Would it reclaim it and leave it so thoroughly reclaimed that it would not raise a crop?

A—I could not say as to that.

Q—Would not that be the effect of it if you should turn the water off?

A—If there was no seepage water?

Q—If no water was run down from Kern River through Buena Vista Slough it would dry that land up?

A—I should judge it would.

Q—That, in fact, has been the effect where the wa-
271 ters have been taken off of what was swamp land around South Fork?

A—Yes, sir.

Q—That was a swamp land district at one time?

A—Yes, sir.

Q—Taking the water from that completely dried it up?

A—Yes, sir.

Q—If all the waters were taken out of Kern River before they reached Buena Vista Slough, it would have the same effect upon the lands in the swamp land district there?

272 A—Certainly it would, unless it was low enough to get seepage.

Q—You say that when you were down there in 1878, in the spring, one stream of water was running one way, I understand you, and another the other?

A—Yes, sir; a portion of the water was going over the dam. That was quite high at the time. I know that the water was nearly over the causeway.

Q—Do you know as a fact whether Kern River ran into Buena Vista Slough in two streams, or not, at two different points?

A—I have heard that it did; I don't know it as a
273 fact. The time that I was down there, when the water was so high and it was running over the dam, was in the spring of 1878. I don't know what month it was. I was going over to the oil wells at the time.

E. M. Roberts,

a witness for plaintiff, being duly sworn, testified as follows:

Mr. Houghton. Q—Are you at work on what is called the Calloway Ditch?

274 A—Yes, sir; I believe that is known as the Kern River Land and Canal Company I worked for that company four years, pretty much all of the time on that ditch. I don't know when the water was first turned into that ditch from Kern River. It was in the canal when I first came to this country. I came here in 1876. The water was running in the Calloway Ditch in 1876. I went on the ditch in February, 1877. There was water then running into the ditch. It was running about twelve miles, as far as I can remember. I think the ditch was then built twelve or fourteen
275 miles; probably completed. I came here in March, 1876. I could not say how far the ditch was constructed then; there was water running in the canal in 1876. I knew very little about the canal until I was employed to take charge of the water. I think at the end of 1877, or the first of 1878, the canal was constructed seventeen or eighteen miles, and the ditch ran to Poso Creek in 1880. I think in April, 1879, it was constructed as far as the Poso Ranch headquarters. I think that was twenty-seven miles from the headgate, as near as I can remember. I don't think I can tell exactly how far it was constructed on the 14th of

276 May, 1879. I think it was constructed beyond what is called the Poso Ranch, but I won't be positive. Poso Ranch, I think, is twenty-seven miles above the headgate. Water was running in May, 1879, to the Poso Ranch or thereabouts. I don't remember whether it was running entirely to that ranch or not. When I first went on to the canal I took charge of the headgate. When I first took charge of it there was about a foot of water running in it.

Q—How long did that continue?

A—I guess I cannot tell you, sir; I can tell you from April, 1877; the first day of April there was 22
277 inches.

Q—How much were they taking out on an average during the month of April?

A—The first two, and on down to the 7th, a foot and ten inches on the 7th; so on down to the 13th, a foot and eight inches on the 13th; so on down to the 20th, a foot and eleven inches on that day; it ran about that to the 30th; there was two feet and nine inches on the 30th; in May it would average about the same; the next month about the same; in June about the same; in July not so much—about one foot and eight inches in July; in August, 1877, it would average about nine
278 inches, that ran down as low as seven inches in August; I think it would average about nine inches in August. We turned the water out on the 31st day of August, on six inches; we did not put it back again until the next season. Of that I have no record. We were running the same amount of water, I presume, during 1878; in 1879, we were running a little more; I presume it would average two or two and a half feet; in 1880 we still increased a little, occasionally ran three feet; it did not exceed three feet in 1880.

Q—How much has been taken out this year?

279 A—It ran down as low as a foot and a half, from a foot and a half to three feet, in 1880. At the present time we are taking out a pretty good head of water; this month we have been taking out on an average 3.9 feet; last month the average was 2.8. I think the headgate that we take the water through into the canal is 80 feet. There has been no change in the headgate since I went there. We take the water from the Kern River at the Calloway headgate; that is on about Section 13, T. 29, R. 27.

Q—To get the water out of Kern River at that point do you have to throw out a wing dam to force the water in?

280 A—Yes, sir, to run a big head of water, when there is a moderate flow of water in the river we do. We have to put that wing dam up every year. It is the intention to have it wash away when the high water comes. I think we had no wing dam there in 1877, nor in 1878. In 1879 we did. We never took all of the water in the river in that canal in the spring of 1879. There never has been any time since I have been there that we have taken all of the water there was into the canal. Nor have we thrown a wing dam clear across the river this year. I am the Sanquero on the canal. I have charge of the flow of water at the head of the
281 canal, and my business is to keep the canal in shape and a head of water in it. The grade of that canal is 7-10 to the mile, and the slope of the bank, I think, is four to one. That canal will carry about four feet of water, probably a little more. We have never had over four feet in it. We have run four feet in it a few times. The canal is different widths on the bottom. At the upper headgate the canal is 80 feet on the bottom; where it leaves the slough and goes out on the plains, a portion of it is 65, I think. Three or four miles below there it gets wider. I don't know the exact width of it. The water is now running in that
282 canal about 30 miles.

Q—How far does the water run before any water is taken out of the canal for irrigation?

A—It runs a mile; no, it does not run a mile.

Q—How near is the nearest land to the river, that is irrigated by that canal?

A—I presume; well, some bordering right on the river; a tract of land belonging to a lady by the name of Cochran, is on the river, but I don't remember the section.

Q—How much land is there bordering upon the
283 river, that is irrigated by that canal?

A—I suppose 1,000 acres; I think it is under irrigation now; but I would not be positive about that. That is something I did not look after a great deal; that is my impression. I presume that 1,000 acres has a frontage of two or three miles on the river. It ran back about the same distance; I should think it would be two or three miles square. After passing the first gate where the water is taken out for irrigation, it is about four miles to the next gate where the water is taken out. There are 250 acres irrigated from that gate at the present time, and to the next gate it is two

284 and a half miles. I presume there is in the neighborhood of a section—Section 19, irrigated from that. I don't know whether it is all under cultivation this year. There is not to exceed a section irrigated from the gate. It is a mile to the next gate. There are two or three gates there close together, and irrigating a ranch. I think about 500 acres. Those three small gates are close together; I think from probably half a mile to 300 yards apart. And then, continuing right along until you get about twelve miles there are a good many farms along the canal for the distance of twelve miles, and all of the land is irrigated. These three small
285 gates that I have referred to are about five miles or probably seven miles from the river, and they irrigate, I think, 500 acres. I could not tell how many gates there are between that point and Poso Ranch. There are a good many. After passing these three gates, the gates are all the way from 150 yards to a half a mile or a mile apart. I presume there are about 8,000 acres irrigated between those three gates and the Poso Ranch. That is, between a point seven miles out and a point 27 miles out. I do not know how much land there is irrigated beyond the Poso Ranch. I very seldom go down to it. Mr. Fillebrown takes charge of it
286 down there. He has charge of the gates. I have gone on the canal a little more than half way to Poso, and not all of the way through. My business is to take care of the upper end of the canal; to keep the supply of water; and I have nothing to do with the discharge of water from the gates.

Q—Who regulates the discharge from the gates?

A—I guess everybody regulates his own water; each one takes his water and irrigates, and gets through with it as soon as he can. There is about 12,000 acres of land irrigated from the Calloway Ditch Canal, this year I think. I don't know how much was irrigated
287 in 1880; I think from 7,000 to 9,000 acres. And in 1879 there was a less quantity; I should think probably 4,000 or 5,000 acres, but I could not say. In 1878 only a small quantity; I presume a couple or 3,000. I was there in 1877. There was very little irrigated in 1877, only a ranch or two; I could not say exactly. I don't remember how much land was irrigated in 1877, I guess there was more than 500 acres. I think there was 1,000 acres, probably more.

288 Cross-examination of

E. M. Roberts.

By Mr. Haggin. Q—You spoke of the water being in the Calloway canal during the years 1877, '78, '79, '80 and '81; you said that in one year it contained so much. carried so much; in another year so much. What did you mean?—do you mean that it ran that way all the time throughout the year?

A—No, sir; I don't mean to be understood that way; I think I said, during the irrigating season.

Q—What is the irrigating season here?

289 A—Well, there is considerable difference of opinion about that; my experience is that we have to irrigate here from—this season, especially, we commenced to irrigate in February.

Q—Is not your irrigating season regulated by the supply of water in the river?

A—Yes, sir.

Q—You irrigate at a time when the water is high in the river?

A—Yes, when the most water is in it.

Q—And the times you referred to when the Calloway carried so much water, were times when the river

290 was high?

A—The river was high at times and low at times during the times when we were carrying this.

Q—Did you take much water when the river was low?

A—Not to a very great extent; we to a great extent regulated it by the quantity of water in the river; we did not take all there was in the river.

Q—You speak of the amount of acreage in cultivation at different times. How do you know the amount of acreage?

A—I only know from what I have been told; and

291 there might have been much more, or less; I did not give it as a fact; I said I thought so and so; I did not mean to state it of my own knowledge, because I have no knowledge.

Re-direct examination of

E. M. Roberts.

To Mr. Houghton. As I came along the canal I only saw a portion of the land under irrigation. My observation extends about as far as a man can see, but I have no way of measuring it, and can only judge or guess as to the acreage. I think my supervision along

292 the levees is about 14 miles. In going along that distance, I can make a rough estimate as to the amount of land under cultivation. The estimate that I have made may be a little high or a little low. As far as I can judge it would be pretty nearly correct. I don't know as to the amount of land under cultivation.

Q—Well, you know as to the amount that was irrigated right along the river there?

A—I do not; I only told you "I suppose so and so;" that I thought there was that much land. We commenced this season to irrigate in February, last year in March. In 1879 we commenced about March; and in
293 the two years preceeding about the same time. We have been in the habit of turning the water out of the canal in July or August. Last year we turned the water out of the canal on July 5th, and the year before, I think, it was the same date. The irrigating reaches from March to July; somewhere about that.

Monday, April 18, 1881.

Plaintiffs offer in evidence Articles of Incorporation of the Kern River Land and Canal Company, the defendant herein, filed with the County Clerk of Kern County on the 8th of May, 1880. The articles are dated May 11, 1875, and they are filed in the office of
294 the Secretary of State on the 19th day of May, 1875.

The articles are read in evidence, and are in the the words and figures following:

Articles of Incorporation
of the
Kern River Land and Canal Company.

Know all men by these presents, that we, the undersigned, have this day associated ourselves together for the purpose of incorporating under the laws of the State of California, a Corporation to be known by the corporate name of "The Kern River Land and Canal
295 Company."

And we hereby certify, that the purposes for which this Corporation is formed, are to construct a canal one hundred feet wide, more or less, and four feet deep, from a point on Kern River near the Railroad Bridge, Kern County, California, extending thence to Tulare Lake, for irrigating, manufacturing, commercial and mining purposes; to buy and sell, lease, or otherwise acquire lands, and manage the same; to raise, buy and sell live stock, and, generally, to engage in every branch of business pertaining to canals, agricultural, timber, mineral or grazing lands.

296 That its principal place of business shall be in San Francisco, California.

That the time of its existence shall be fifty years from and after the date of its incorporation.

That the number of its Directors or Trustees shall be seven, and that the names and residences of those who shall serve until the election of such officers, and their qualifications are:

Names.	Residences.	
W. H. Baxter	San Francisco,	California.
William Holden	ditto	ditto
297 J. P. Moore	ditto	ditto
O. P. Calloway	ditto	ditto
J. A. Robinson	ditto	ditto
Chas. F. Brown	ditto	ditto
E. W. Scott	ditto	ditto

That the capital stock of this corporation shall be five hundred thousand dollars divided into five thousand shares of the par value of one hundred dollars each.

In witness whereof, we have hereunto set our hands and seals, this eleventh day of May, A.D. 1875.

W. H. Baxter, [SEAL]
William Holden, [SEAL]
298 J. P. Moore, [SEAL]
O. P. Calloway, [SEAL]
J. A. Robinson, [SEAL]
Chas. F. Brown, [SEAL]
E. W. Scott. [SEAL]

Signed and sealed in presence of—

State of California, }
City and County of San Francisco. } ss.

On this eleventh day of May, A.D. eighteen hundred and seventy-five, before me, E. H. Tharp, a Notary 299 Public in and for the said city and county, personally appeared W. H. Baxter, William Holden, J. P. Moore, O. P. Calloway, J. A. Robinson, Chas. F. Brown and E. W. Scott, known to me to be the persons whose names are subscribed to the within instrument, and they severally acknowledged to me that they executed the same.

In witness whereof, I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

[SEAL.] E. H. Tharp, Notary Public.

300 OFFICE OF THE COUNTY CLERK }
Of the City and County of San Francisco }

I, William Harney, County Clerk of the City and County of San Francisco, State of California, and Clerk of the County Court thereof, do hereby certify the foregoing to be a full, true and correct copy of the articles of incorporation of the "Kern River Land and Canal Company," filed in my office on the 18th day of May, A.D. 1875.

Witness my hand and the seal of said Court, this 18th day of May, A.D. 1875.

WILLIAM HARNEY, County Clerk.

301 [SEAL.] By John H. Harney, Deputy Clerk.

Endorsed: Filed in the office of the Secretary of State, the 19th day of May, 1875.

DRURY MELONE, Sec. State.
By N. E. White, Deputy.

[SEAL] STATE OF CALIFORNIA. }
Department of State. }

I, D. M. Burns, Secretary of the State of the State of California, do hereby certify that I have compared the annexed copy of articles of incorporation of the "Kern River Land and Canal Company," with the
302 certified copy of the original now on file in my office, and that the same is a correct transcript therefrom and of the whole thereof.

Witness my hand and the great seal of State, at office in Sacramento, California, the 5th day of May, A.D. 1880.

[SEAL] D. M. BURNS, Secretary of State.
Deputy.

Endorsed: Filed May 8th. 1880.

A. T. LIGHTNER, Clerk.

303 JOHN BARKER.

A witness for plaintiff, being duly sworn, testified as follows :

I reside on Kern River, on the Rio Bravo Ranch. I have lived there for over six years. I am 49 years old. I am a stock raiser. I first became acquainted with what is now Kern County in 1854.

Q—When did you first visit the country which is now Buena Vista Slough?

A—I think about the fall of 1854. I first came along the east side, along the lake shore, and along the east

304 side, on this side. We were hunting and looking at the country, spying out the fatness of the land.

Q—How long at that time were you along at that slough?

A—I suppose, probably, I went up there on two different occasions that year; probably ten days or two weeks on each time. I cannot tell where I first struck the slough. The country was a wild, new country at that time. I could not give you any given point. I came to the east end of Tulare Lake, and followed up on the outside of the swamp all of the way up to where this river delta sets in. We came up as near as we
305 could get to the Buena Vista Lake. We did not follow up along Kern Lake that year. We at that time crossed Buena Vista Slough. There was plenty of water there. It was in the fall; in October, I should think, or November. There was a current in that water setting north towards Tulare Lake. I crossed from one side to the other.

Q—Where did you cross that first; how near to Tulare lake?

A—The Indians had a ferry there at the head of the lake. Had tule bolsas, boats made of tules, that were used in crossing. The trail went across there; and
306 they used to travel from the San Miguel to the San Luis Obispo. There were numerous tribes of Indians camped about there at that time. I crossed at the ferry, also at points above. The next point that I crossed above must have been several miles above that. I could not tell exactly. We made rafts there, out of tules, the same as the Indians made them. In fact, we had some of the Indians with us. They followed us to get what meat they wanted.

Q—How many times did you cross between the point where you made your first crossing with the
307 Indians, and the time you struck Buena Vista Lake?

A—During those two trips I suppose we must have crossed several times; we crossed for an elk we had wounded; we always crossed on tule boats; the slough was not in a condition so that we could ford it, any place that I found. I was there again in 1855, on the same kind of a trip, on the west side, on the other side. I came up then to the head of Kern Lake, followed around Buena Vista Lake to Kern. I did not know at that time where the water of Kern River discharged; at that time I did not know the course of Kern River after it left the bluffs, in the town of

308 Bakersfield. I could not say how many times I crossed the slough during that trip, along in 1855, a great many times; I was in company with professional hunters, hunting for Fort Miller; we had an ox team, and each man was mounted on a saddle horse; we were a month, I suppose, on that trip. In crossing Buena Vista Slough at that time, on that trip, we crossed in the same manner we did the trip before, on tule boats; that was in the summer or fall. We could not cross there that time with the team; we could not ford it at any places that I saw. We passed up along the south margin of Kern and Buena Vista Lakes; we
309 started in on the San Joaquin River at the head of Fresno Slough, and came all of the way up. After getting to the head of Kern Lake, we went back again the same way we came; we did not cross the slough as much going back as we did coming, because we had our team loaded with meat, and that is what we went for. I don't remember whether we crossed going back or not; we might possibly, but I don't recollect. I don't remember what the condition of Buena Vista Slough at that time was, where it ran out of Buena Vista Lake.

Q—I mean, along for the first five or six miles above
310 Buena Vista Lake?

A—There seemed to be plenty of water there and myriads of fish in it. We crossed that slough, I think, within five or six miles, also in 1854. I next visited Buena Vista Slough in 1856; I went up there with W. F. Montgomery to look at the slough, to examine the water connection between the lakes.

Q—Between what lakes?

A—All of them: Tulare, Buena Vista and Kern.

Q—Did you make such an examination, do you remember?

A—We did.

311 Q—Go on and state in connection with that examination between Tulare Lake first, and Buena Vista.

A—Well, we went up there. I can explain the reason why I went up there if you wish. I went up there with Mr. Montgomery. He went there on the representations I had made to him about the water connection, to examine it, and test the feasibility of the project of constructing a canal up there. We went there for that purpose, to examine the slough and connections between the lakes all of the way along.

312 Q—What did you find the condition of things between Tulare and Buena Vista Lakes? What did you find?

A—We found water all the way along the slough between the lakes.

Q—Between Kern and Buena Vista Lakes?

A—Yes sir.

Q—How deep was that water?

A—I could not tell. At some places it was deeper than others.

Q—Was it running at that time?

A—Yes sir.

313 Q—In the channel?

A—It appeared to be wherever we struck it. I could not tell whether it was all of the way along. It was after the Indian war occurred in 1856; it must have been the last of August or the first of September; somewhere along there. It was after the high water.

Q—How many times do you suppose that you crossed that slough that you found there, in making this trip from Tulare to Buena Vista Lake?

A—Well, we crossed it five or six times I think. I don't know the exact number of times we crossed it; several times. When we crossed, we crossed on tule
314 boats, we did not ford it at all. I don't know what portion of the swamp and overflowed land was covered with water at that time. The tules were about 16 feet high all around the margin of the slough. In a great many places where I went into the slough, we followed in the elk trails to get through, and in other places where the mustangs had broken a trail in, to get to the water.

Q—In following through there how wide did you find the stream of water?

A—In following through there between Tulare and Buena Vista Lakes—the first slough is the one I am
315 speaking about. At the places where I saw it at that time I should think it must have been 30 or 40 yards wide. There was a current at the time, and it was setting down towards Tulare Lake. After getting up to Buena Vista Lake I went on to the channel between Buena Vista and Kern Lakes at that time. We found there a running stream of water going down there into Buena Vista Lake. At that time I went to the point where Buena Vista Slough leaves Buena Vista Lake. I think the water was running there. It was running, I know, a short distance below. I could not say how

316 much was running; but there was communication all of the way through.

Mr. GARBER—How is that? I did not hear.

A—I say I could not say whether it was running or not right there; right where it leaves the lake, and there was an open water communication; and it was running below.

Mr. HOUGHTON. Q—Was there an open water communication all of the way between Buena Vista Lake and Tulare Lake?

A—Wherever I could get to it or see it, there was. I was up there on Buena Vista Slough again in 1857.
317 I was in fact up there again the same year, a second time, in 1856; still later in the fall in company with W. F. Montgomery again. It must have been in October or November.

Q—What was the condition of Buena Vista Slough at that time?

A—Well, very similar to what we saw it before. We did not make as close an examination of it as we did on the former trip, because we contemplated making the trip around. On that trip I don't think we crossed the slough, but we came around the head of Kern Lake up to Gordon's Ferry, up here on the river; that is,
318 above Bakersfield on the river; five or six miles, I should think. I did not at that time learn where the main channel of Kern River ran after it left the bluffs. We followed around after leaving the eastern end of Kern Lake——

Q (interrupting)—Well, what was the condition of the country up through that way?

A—Well, we struck a river around there somewhere, near where the Adobe Station is now, or a channel of it; we took it for the river. I think the Adobe Station is 16 miles or such a matter down the river. The point we struck the river must have been
319 near where Charlie Kerr's ranch is now, 15 miles south of this point. We struck the river there. We did not cross it there. There was a camp of Indians there, and men belonging to Tejon, I think. There seemed to be quite a large, bold stream there. It went down into the lake, I suppose; Kern Lake. We followed the stream up to a point opposite where Bakersfield is now. There seemed to be tules all along there on that stream.

Q—Was it about the same as it was along Buena Vista Slough?

320 A—Similar, only that there was timber there. There was not any on the Buena Vista Slough to amount to anything. I went to Buena Vista Slough again in 1857. We started a survey from the head of Fresno Slough to Tulare Lake. I was on that survey, we ran that survey up into Tulare Lake. Afterwards we came on to Buena Vista Slough.

Q—What were you doing on Buena Vista Slough?

A—Well, I was making further explorations or verifications. There were parties with us to whom these representations had been made by Mr. Montgomery and myself; and we wanted them to see. That was in
321 1857. Fresno Slough, that I speak of, runs out about 12 miles from the San Joaquin, right towards Tulare Lake. It empties into the San Joaquin, and it is where the waters flow when they flow over the brim of Tulare Lake. It runs down the Sampson and Fish Slough, and then runs into the head of the San Joaquin Slough, where the San Joaquin receives it. Fresno, Sampson and Fish Sloughs are the sloughs through which the waters of Tulare Lake discharge themselves into the waters of the San Joaquin. Summit Lake is about 37 feet above the San Joaquin. Tulare Lake is 33 feet above the San Joaquin. At
322 that time the waters were not flowing from Summit Lake down the slough. The distance from Summit Lake to Tulare Lake at that time, was about four miles from the margin north. We followed along Buena Vista Slough at that time, as far up as Kern Lake.

Q—As far as Buena Vista Lake? I was confining it to Buena Vista Slough. That was in 1857?

A—Yes, sir.

Q—What was the condition of Buena Vista Slough at that time, as compared with its condition when you were there in 1854, 1855 and 1856.

A—Very similar. On that trip we did not cross
323 Buena Vista Slough. We went on the connecting channel between Kern and Buena Vista Lakes. The condition of that channel was about the same we had seen it before. That was in the fall.

Q—Was the water at that time running all the way from Buena Vista Lake to Tulare Lake?

A—Yes, sir. That was in the fall of 1857.

Q—Was it also running between the two lakes, Kern and Buena Vista?

A—I think so. I next visited the slough in 1858 and '59. The next time was in 1858. I was then there upon

324 a hunting expedition. I suppose I was there two or three weeks. It was in the summer time. I was with the same party of hunters I have spoken of before, hunting for Fort Miller. It must have been in July, 1858, I think. That was after the summer freshet had gone down.

Q—Did you at that time cross the slough too and fro?

A—Yes, sir.

Q—How many times do you suppose?

A—Sometimes daily, almost; at different points all along the length of it.

325 Q—What did you find the condition of it about that time?

A—About the same as before.

Q—How did you make your crossings?

A—We made them on tule rafts?

Q—You found water flowing at that time from one lake to the other; Buena Vista Lake and Tulare Lake?

A—Yes, sir.

Q—Was that channel the same as you found it the years before?

A—I could not see any difference in it. We continued no further around on that trip. I think I was there

326 again in 1859, and again hunting. I could not tell the time. It was somewhere along the summer season. It was after the summer freshets were passed.

Q—Did you find the same condition of things?

A—As near as I can remember. I don't remember any particular change about it.

Q—Was there any change in the condition of affairs from the time you were there on other trips than when you were there in 1859?

A—None that I can see. We crossed the channel at that time to and fro. We crossed as I have described

327 before, on tule boats. We did not attempt to ford it. At that time I went on the connecting channel between Kern and Buena Vista Lakes.

Q—What was the condition of that channel?

A—Well, it was just the same as I had seen it previous visits. On that trip we went no further than the head of Kern Lake. At that time I only went to the foot of Kern Lake. I did not go to the head of it.

Q—At those various times that you have spoken of, did you make the trip all the way from Buena Vista to Tulare Lake and away up to Kern Lake each time?

A—We went around by the head of Fresno Slough,

328 where the Casa Blanca now stands; came all the way around that way.

Q—Every time? Then you came away up to Kern Lake from Fresno Slough?

A—No, not every time. The latter part of the time we crossed over where I lived at Elkhorn, right across through that swamp.

By Mr. GARBER. Q—Where is that Fresno Slough, that you speak of?

A—It runs out of the San Joaquin River.

Q—It is down below Tulare Lake, is it?

A—Yes.

329 By Mr. HOUGHTON. Q—Then I would ask you this: Every time that you made a trip on Buena Vista Slough, did you go the whole length of the slough from Tulare Lake to Buena Vista Lake?

A—Every time.

Q—Yes?

A—Yes, I think so.

Q—And also on the connecting slough between Buena Vista and Kern Lakes?

A- Yes, sir.

Q—And I understand you to say, you found no perceptible change in any of those trips?

330 A—I didn't notice any.

Q—Do I understand you to say that all those trips you made were on the west side, with the single exception of the first, which was on the east?

A—Yes, sir. I don't think I visited Buena Vista Slough after that till about 2 years ago. I went down where the dam and bridge was built. That was in 1878; no, it was in 1879, two years ago. I went down as far as Ebberly's hog camp. I should think that would be about 16 or 17 miles below the bridge. I refer to the bridge constructed over by the dam. I was then moving my sheep down there to find some
331 grass for them. Buena Vista Slough at that time was pretty dry.

Q—Was the main slough, as regards position, in the same place as when you saw it, from 1853?

A—No; it was not in the same condition. I could not recognize the country. It did not look anything like the same conntry at all.

Q—How about the change in the position of the slough; did it run through the same country?

A—The slough seemed to be somewhere near the place it was at that time.

332 Q—It had not changed so far as the locality was concerned?

A—I could not tell about that. At that time it was nearly dry. At that time I went down by Canfield's, and then followed straight down to the slough, at a point 3 or 4 miles below Kern Lake.

Q—Below Kern Lake on Buena Vista?

A—Below Kern; no, Buena Vista. During none of these trips that I made south of Bakersfield did I ascertain where the waters of Kern River ran to; but it ran around the bluffs. I did not examine that country any further down than where we came on to the
333 river at one or two points and camped at the time I first knew that river. I know nothing about the channel above at any point except where the ferry was located. Kern River, after leaving the cañon or mountain, runs in a nearly due western course, I think, down to a point where New River commences, or near the county bridge. I have been intimately acquainted with the course of the river between these two points for these seven years. That is all.

Cross-examination of

334 JOHN BARKER.

Mr. FLOURNOY. Q—I understand that you are familiar with Buena Vista Slough continuously from 1854 up to and including '59?

A—Yes, sir; I saw it all of those years.

Q—Were you there through the freshets or overthrows? I understood you to say that you were there after the freshets passed away?

A—Well, sir, during those years there were no great freshets. I was there during those years, after the spring rises.

335 Q—I understand you to say that you found water very plentiful all along, flowing, or a current, all along down Buena Vista Slough to Tulare Lake?

A—Yes, sir; I should think it was a one or two-knot current in places where I struck it; one or two miles an hour I mean.

Q—A broad current?

A—It was usually about the width—as far as the width of the slough was—it was as broad as the slough was, or the open water. What I would call the slough would be where I found the open water. What I call the channel of the slough is where we get into open water.

336 Q—Well, then, where you get into open water, how wide was the channel?

A—I should think 30 or 40 yards.

Q—That was continuous all through from Buena Vista to Tulare Lake?

A—I could not tell that. I say wherever I got into it and could see it, there was a channel and a current.

Q—Do you know, then, Mr. Barker, that there was a continuous running stream during the time you were there, from Buena Vista to Tulare Lake?

A—I know there was one wherever I got into it, that is all.

337 Q—Well, do you know there was one from Buena Vista to Tulare Lake?

A—No, sir; not to be able to say that I have been the length of it. I have seen the length. It was impossible for any man to see the whole length of it at that time.

Q—At how many points did you visit the stream itself.

A—Well, I could not tell you. The way was, we were hunting along there, and used to go to the places where it was easy of access, and camp there, and then go out and hunt. When we wanted to get across the
338 slough, we would go to work and get across. We were not hunting water or a slough. We were hunting elk. When we went to the slough we would go for the purpose of getting water.

Q—That is what I understand. You never undertook to see whether there was any other crossing of the slough?

A—We never found any.

Q—Did you hunt for any?

A—Yes, sir; we would naturally have availed ourselves of them, if we could have found them.

Q—You did not hunt for any particular places?

339 A—I cannot say that we hunted for them; but we never found them; we did not care much about them.

Q—How deep was this channel?

A—Well, in some places we had a long pole, perhaps 12 or 15 feet long, and in some places we could not touch bottom with it.

Q—What is the current—between the slough, I understand you are speaking of?

A—In the slough, between the lakes.

Q—It was a general and continuous channel?

A—Yes, sir.

340 Q—From 12 to 15 feet deep?

A—In some places where we could not touch bottom with a pole of that length.

Q—How shallow would it get?

A—From that down to nothing on the shores.

Q—What I mean is, did you find any place where it was much shallower than that?

A—Yes, sir; I found places where it was more than four or five or six feet, perhaps. I could not tell how many places I found under four feet. I don't think there were any places under four feet.

Q—Then your opinion is that the water was running
341 at any place you found it, at least four feet deep, and it was forty yards wide?

A—Well, yes, I expect so, at any place where I found it; about that rate. Of course I was not looking at it with an idea of informing myself correctly about this; and I cannot speak positively about it. If I had been looking for this with an idea that I should have to speak about it again, I should have tried to remem ber it.

Q—I am trying to get at the best of your recollection about it. I understood your memory to be very clear on your examination about it. But I want to get at
342 the facts as they were.

A—One thing that makes my memory very clear is that my experience cost me there about $5,000; and I remember that part of it extremely well.

Q—That particular fact, however, is not material, I believe, in this case.

A—No; but I wanted to give you the reason for my memory being so clear. I probably do not remember the other facts so well as I do that part of the business.

Q—That was the condition, as I understand you, all along from 1854 to 1859 inclusive?

343 A—Yes, sir; it approximated that, I think, so far as my observation would go.

Q—You had to ferry across or boat across on rafts every time you crossed it?

A—Yes sir, we had to ferry across or cross on rafts every time we crossed it. I could not tell you whether I saw Kern River proper at any time during that time, or not. The only river I saw was what I have described before, where we struck the channel coming somewhere down near the adobe—somewhere near where Charles Kerr's place is now. Whether that is Old River or not, I do not know.

344 Q—How much water did that stream carry?

A—There was quite a large, bold stream flowing between perpendicular banks there. This point was somewhere near Charlie Kerr's ranch. I think that would be east of Kern Lake. I cannot tell you how that stream compared with the stream I saw flowing down through Buena Vista Slough.

Q—Is it larger or smaller?

A—I could not tell you, it was so different. The knowledge I have of guaging running streams teaches me that no man can tell anything about the volume of water that flows through a place like that, compared
345 with a flat open place. I would not tell whether it was smaller or larger; that is, with regard to the amount of water that was flowing through.

Q—Did it make any impression upon you at that time, as to being larger or smaller?

A—In that particular respect, sir, it did not. I did not think of it, or consider it.

Q—You did not notice that stream particularly?

A—I did not notice it any farther than that there was a running stream of water which I supposed was Kern River, or an arm of it.

Q—At what points on Buena Vista Slough did you
346 make your crossings? Name the islands.

A—I don't know that I could name them. There was not any names for places at that time; nothing there; nobody there. There was no name for any of the points there that I know of. I know of no names now. There was no name given to anything at that time. As I told you, I have not been there since, until two years ago. I don't know of any name given to any part of that swamp.

Q—How far from the Tulare Lake did you cross?

A—I think we made our first crossing, the first time I crossed it, some three or four miles from Tulare
347 Lake. I had no idea then how far it was from Tulare Lake to Buena Vista Lake. At that time I found some streams going into Tulare Lake, about three or five miles from Tulare Lake. I was not there in 1854. I was there in 1855, and after that in 1856, '57, '58 and '59. Along there I suppose to the same point, at about the distance from Tulare Lake, and I found this same described current of water at this time. I could not tell how far above that point it was to the next place I crossed. We crossed it at so many points there that I could not remember anything about where they were now.

348 Q—Can you come within one or ten miles of it?

A—I suppose we crossed it several times between that and Buena Vista Lake; a number of times. I don't remember how far the second crossing above the first was that we made. I suppose it was within ten miles. It might have been less. We found a channel of water there; very similar to the one we had found below. I could not say whether it was one or ten miles. I did not charge my memory with the localities. I was not crossing it to find particular localities. I was just simply crossing it in company with Mr. Montgomery and myself to see how the water was there.

349 Q—Still, crossing several times, going south on a stream of that sort, having to ferry each time, wouldn't it naturally strike your attention that your ferrying was very close together?

A—Yes, sir, I suppose it was. I must have crossed within five or six miles of that. That was the third crossing. But I don't speak positively about it now. I think the third crossing was 5 or 6 miles from the second. I think so.

Q—Well, did you cross it any more?

A—Yes, sir.

Q—How far was that from the third crossing?

350 A—I must have crossed it up there somewhere near where the hog camp, I know, above or between there and the bridge.

Q—Where is the hog camp? I thought you said you didn't know anything about these localities?

A—I said I was there two years ago down as far as that; about 13 or 15 or 16 miles; I don't know exactly what the distance is below the bridge at Coles'. I think it is 12 or 15 miles to the hog camp. I should think that made the fourth crossing; somewhere in that neighborhood. But there was nothing there at that time to designate it.

351 Q—How far was that above the third crossing?

A—I cannot tell you that. These are things that I did not charge my memory with. It is impossible to tell you the definite distances. I cannot tell anything about that. It is no use for me to try to answer a question that I don't remember, and don't know anything about. All that I know is that we took no notice of localities or points; but simply went in where we could find a place to get in.

Q—Was it as far as the distance from the first to the second point of crossing?

352 A—I dont remember whether it was or not.

Q—It must have been some miles?

A—I suppose so.

Q—Two or three miles, about?

A—It might have been any of them. It might have been anywhere from one to ten.

Q— Where did you cross again, the fifth crossing?

A—We crossed up towards the head of the slough, where it joins Buena Vista Lake.

Q—And the same stream was there?

A—Yes, sir.

Q— What would be the object in these crossings?

353 A—When I went with Mr. Montgomery, the object was to discover whether there was an open channel of water connecting the lakes; Tulare and Buena Vista Lakes.

Q—Was there a swift current?

A—As I have described before, I should think from 1 to 2 knots an hour. We did not go up in a boat or anything of that kind.

Q—The object was, as I understand, whether there was a current.

A—Whether there was a channel of water, we were not looking for a current particularly. That was in
354 1857.

Q—You made the same crossing in 1858?

A—That was in 1856 I made the first trip with Mr. Montgomery.

Q—Then you made the same crossing in 1857?

A—Very similar, I think. I cannot state that they were the same. We went up again in 1857?

Q—What was the object in 1857?

A—It was the same object. There were parties with us to whom these representations had been made from knowledge gained in the former expedition; and we wanted them to see it.

355 Q—In 1858 the same thing was repeated?

A—In 1858 I say I went up there in company with some hunters; and we just crossed when we wounded game or saw them across on the other side; substantially in the same way. And in 1859 the same way; making about the same crossings.

Q—At about the same place?

A—I could not say about that. No, sir; we were governed by expediency in that.

Q—Each time? What I want to get at is, was there any difference in the first crossing above Tulare

356 Lake, each time, from 1856 ranging to 1858 and 1859? You began by crossing about four miles from the head of Tulare Lake. In 1859 did you make the same crossing in that neighborhood, and in those years?

A—I don't know that I did. I could not say positively that we made a crossing at that point at any other time. It might have been three or four miles away. I don't know; I could not locate the point now within three or four miles. We were not looking for any particular points at all. We went into the most convenient places. The country was gradually changed in those times. The tules were becoming burned off,
357 and new trails being broken; cattle being driven about in there, and the country was gradually changing, so that in ten years time a man would not recognize the same country. I am speaking of from 1854 to 1859. The changes were so frequent and continuous that a man ten years after the time would not know the same country.

Q—As you found, when you went back in 1879, a very different looking country from what you had seen in 1859?

A—It was different; changed. The tules were being burned off, and there had been stock traveling in there
358 and broken trails through, and tramped what was formerly a large expanse of tules. The brush and weeds are all burnt out there, clear out, and it is changed considerably.

Q—What was the condition of the water?

A—Well, there was a channel of water there.

Q—The same way?

A—Well, about the same way; in a very similar way, as near as I can tell; no material change that I could discover.

Q—No material change from the time you first saw it to the last?

359 A—It might have been more or might have been a little less.

Q—Of course, very similar. You cannot be accurate about those things. You found the same general appearance?

A—Yes, sir.

J. V. Rosemeyre,

Being called for the plaintiffs, being duly sworn, testified:

Mr. Houghton—Q—When did you first come to Kern County?

360 A—In April, 1856. I first located on the Tejon ranch. I first came to what is known as Kern Island, in 1858. I first came across the head of Kern Lake at the Consuelo, where David Alexander formerly lived. I crossed the lake right at the head of Kern Lake. We swam our horses across it. In going back I came right through the island, close down near where Charles Kerr now lives. We found a stream of water near where Kerr now lives. It was on the south slough, I suppose, twelve or thirteen miles from here, at the east end of Kern lake.

Q—What was the condition of the slough at that time?

361 A—I found quite a volume of water there, and between the south fork and the Consuelo there was small sloughs there. This large stream that we came across on horseback very easily; I suppose the water was three or four feet deep, and it was some twenty yards wide. It was in the fall of the year—at the September rodeo. I went down to Mr. Alexander's to get some cattle belonging to the government, with him. I have followed the stream up from the eastern end of Kern Lake. I have been up it; I think it was in 1863. There was then quite a quantity of water in it.

362 Q—Has that channel, that you know of, any name?

A—I believe it was termed the south fork of Kern River. At that time I judge the waters of Kern River ran down through that channel. There was quite a stream of water running through there. I don't remember crossing that stream after 1858. In 1863 I did not cross it. I simply came on the east side of the slough with a band of sheep.

Q—After that stream passed Charley Kerr's, where did the waters of that stream empty?

A—They emptied into Kern Lake—the east end of it.

Q—What was the condition of the country between
363 where you crossed at Charley Kerr's and Bakersfield at that time?

A—Along the main road?

Q—Along that stream?

A—Oh, there was no water, that I recollect, there at all. That is, no water you mean?

Q—I speak of what was the condition of the country along that stream, the south fork?

A—Well, it was a very brushy country, very thickly wooded country in those days. I don't know what the condition of the country was from Charley Kerr's down

364 to the lake. I was never in that section of the country.

Q—Do you know whether the waters changed, if at all, from what is called the south fork?

A—Yes, sir; in 1862 the waters changed. There was a flood that season. After that I think they ran towards the Consuelo or Old River here—through the channel known as Old River. Some water still ran after that in old south fork—some little water.

Q—Will you look at that map (Map 1 showed the witness), and see if you recognize Old River that you referred to?

365 A—Yes, sir; the channel marked on Map 1 as Old River is the channel that I refer to.

Cross-examination of

J. V. Rosemeyre.

To Mr. Garber—I resided at the Tejon ranch during the period I have been testifying about. That is about 30 miles from Bakersfield. I lived there from 1856 to 1861; then I lived in Los Angeles county. I returned in 1862, and lived there until 1867 and then went about 12 miles from the ranch to Fort Tejon, right on the road

366 from here to Los Angeles. Then I came back again to Tejon ranch in 1873, and I have been residing there ever since.

Q—From the time you first went to the Tejon ranch to live, how often did you see the water that you speak of?

A—I came here in 1858, as I told you, to Consuelo ranch. I have not been across this water from 1858 on. I could not tell how often I crossed that stream after 1858, but very often. I know where Kern and Buena Vista lakes are. I have seen them on numerous occasions, very frequently, since 1858, and at different seasons

367 of the year.

Q—Well, about how often, we will say, from 1859 to 1860, how often did you see those lakes?

A—In 1859 and '60 I was not there.

Q—1861, '2 and 3?

A—I was not there.

Q—In 1864 and '5, and along there?

Mr. Houghton—I object to that as not cross-examination. We did not ask the witness anything about the lakes, or about anything after 1863.

[Objection overruled, and plaintiffs except.]

368 Thereupon, and after the overruling of said objection and the exception thereto, the defendants' counsel asked the witness the following:

Q—In 1864 and '5 were you there at Tulare Lake and Kern Lake, or Buena Vista and Kern Lake?

To which there was the same objection, ruling and exception, and the witness answered to said last-named question:

A—No, sir; not in 1864 or '5.

The WITNESS—I was not there in 1864; I was there in 1858, 1859 and June, 1861. I was there in July, 1861, and in September, 1858.

369 Q—Did you pass through the two lakes and connecting channel between them at that time?

A—No, sir; I did not. I passed around the outskirts of Buena Vista Lake and Kern Lake. I went to the connecting channel between the lakes at that time, but did not cross it. I went to the edge of it.

Q—Was that one sheet of water where the lakes are—Buena Vista and Kern—at that time a large sheet of water, some 20 miles long?

A—No, sir.

Q—How was it?

370 A—It was simply a channel running through from Kern Lake to Buena Vista Lake.

Q—How wide was that channel?

A—I suppose 15 or 20 feet wide, and in some places seven or eight feet deep, and Buena Vista and Kern lakes were full.

Q—Which way were they flowing? From Kern to Buena Vista lakes?

A—From Kern to Buena Vista.

Q—Well, Kern Lake was not yet full, was it, at that time?

A—Yes, sir; Kern Lake always used to have an abund-
371 ance of water in it. I cannot say that it had any more water in it at that particular time than at any other time.

Q—When you were there at that time, the two lakes did not run together into one.

A—No, sir.

Q—Did the water spread out so as to make it practically one lake?

A—No, sir.

Q—Did you ever see them in that condition?

A—No, sir; I never did. In 1859 I crossed Buena

372 Vista Slough, I suppose, three or four miles below Buena Vista Lake. I don't know where Cole's bridge is. I was last down there in 1859, the time I crossed the slough.

Q—What was the condition of the water there then?

The plaintiff objected to the question, on the ground that it is not legitimate cross-examination.

Objection overruled Plaintifis excepts.

The WITNESS—I was hunting down there—hunting elk—and I had to make a tule boat to get my dried meat and cooking utensils across the stream. I crossed it, I suppose, three or four miles below where it came out of Buena Vista Lake. It was in June. I crossed just at
373 the west end of Buena Vista Lake. I did not go any further down Buena Vista Slough. That was three or four miles below Buena Vista Lake.

By the COURT—Q—You said, if I understand you correctly, that in 1858 you crossed at the place down where Charlie Kerr's is?

A—Yes, sir; on my return.

Q—You went to the Consuelo ranch. Where is that ranch?

A—The Consuelo ranch is situated right on a stream of water; I suppose what is Old River. I suppose 15 or 20
374 miles from Bakersfield.

F. P. McCRAY.

A witness called for plaintiffs, duly sworn, testified:

By Mr. HOUGHTON—Q—Mr. McCray, what is your occupation?

A—My occupation is that of surveyor. Have been a surveyor for about 12 years or over. My home is in Hollister, San Benito County. I have been County Surveyor for that County for 6 years. I have made surveys in this county on what is known as the Buena Vista Slongh?

Q—Have you made surveys there in tracing sloughs
375 that run through the body of swamp and overflowed land along that slough?

A—Yes, sir.

Q—Have you, in connection with the survey, platted the same on a map?

A—Yes, sir.

Q—Is that one of the maps that you have made in connection with this? (Map shown witness.)

A—Yes, sir.

Q—I will ask you to look at that?

Mr. McALLISTER—Call that map No. 2.

376 By Mr. HOUGHTON—Q—State if that is a correct delineation of the slough or channels that run through that body of swamp and overflowed land, as far as that extends?

A—That is substantially so; yes, sir.

Q—You made the survey and plat in connection with that?

A—I made the survey of this portion of the slough, and the upper end of the swamp is meandered. There is the beginning of the levee, and that portion of the slough.

By Mr. GARBER—Q—That is what is called Wible's
377 camp?

A—That is head-quarters Wible's camp. A portion of the slough running considerably beyond the map has been meandered down to the same point, to where the button-willows spread, Section 14, Township 29, South Range 23 east; thence, from that point, all that portion which is shown on this map was subdivided by myself, and at the crossing of the section line, these sloughs were noted, and the balance were sketched in between them. For instance, to show where the sections run, there it was crossed, there again it was crossed, and so on. All that
378 was to connect these between these crossings of section lines. They were sketched in on the field.

Mr. MCALLISTER—That would be map No. 2; Mr. Reporter.

Mr. HOUGHTON—Then I will ask you to look at that map (another map shown to the witness) and see if that is the same as to the continuation of that slough where this leaves off?

A—Yes, sir.

By Mr. GARBER—Q—Is this where the other leaves off?

A—No, sir; that comes on the lower side. The last map shown the witness is marked No. 3.

379 By Mr. HOUGHTON—Q—I understand you to say, Mr. McCray, taking Buena Vista Slough from where it leaves Buena Vista Lake, that you meandered that line, or followed it right down to Section 14, Township 29 South, Range 23 East?

A—Not the entire distance from Buena Vista Lake.

Q—From what point then?

A—From where New River enters the slough.

Q—From where which branch of New River enters the slough?

A—Well, where the branch that enters by what is

380 known as the "Point of Hills." That is the northern branch.

Q—You have meandered it from where the northern branch of Kern River empties into Buena Vista Lake down to Section 14, Township 29, Range 23?

A—Section 14, to that point. I made the survey and marked all the crossings where the section lines crossed the slough. I noted them, and between those points it was sketched in.

Q—On the field?

A—On the field, as a rule.

Q—What do you mean by as a rule?

381 A—Well, sometimes; I might answer the question this way. When they were sketched on the field, they were done just at that moment. It might have been done sometimes afterwards, before they were made.

Q—How long afterwards would it be in any case?

A—Well, it would not be any length of time, so far as that is concerned. It would be during the survey, is what I mean.

Q—Then these channels, as they are shown on this map, are correct, as they are on the grounds delineated here, as they are on the ground?

382 Mr. GARBER—What is that?

Mr. McALLISTER—The channels of Buena Vista Slough, as delineated on maps 2 and 3, are correctly expressed as they now exist on the ground?

A—I think so; yes, sir.

Mr. HOUGHTON—Q—This is made from an actual survey. When they crossed the section lines it is made from actual survey Then, if there was any error at all, it was simply as to the channel between the two section lines?

A—Yes, sir; that is all.

Q—Does that cover the whole distance between where

383 New River enters the slough and Buena Vista Lake?

A—Not the entire distance.

Mr. HOUGHTON—How far is that from Tulare Lake—the southern extremity of that survey?

A—I think it was two or three miles. I don't remember now. I didn't see the water where it was terminated.

Mr. McALLISTER—Q—The survey runs between two and three miles of Tulare Lake?

A—I think so; I am not positive.

Q—Did you run those section lines on maps 2 and 3?

384 A—I did on this lower map, Map No. 2. I subdivided all that portion and a portion of the others.

Mr. HOUGHTON—Q—This survey extends through all the lands described in the complaint in this case, doesn't it, or do you know?

A—Yes, sir; it does.

Q—Have you marked on that plat, in any manner, the land that is described in this complaint, to designate it?

A—Yes, sir.

Q—How?

A—By bordering it in red.

Mr. MCALLISTER—Q—Then that encircled in red is
385 land described in the complaint?

A—Yes, sir.

Cross-examination of

F. P. MCCRAY.

The lands in red are those contained in a schedule shown to me, and said to be contained in the complaint. That is all I know about it. I personally meandered that slough from where the north fork of the delta of Kern River enters Buena Vista Slough down to section
386 14. The line of that slough in this map represents the meander lines—represents the slough. By the slough I mean the channel that runs down through that swamp land. I mean the channel that is marked there by those lines. At the time I surveyed there was no water in it. That was in December, 1877. The channel was marked by perpendicular banks, and by various widths and various depths. There were places where it was fifteen feet deep, and others, perhaps, not more than three feet deep. In running that meander, I located that slough by metes and bounds—that portion of it. I established stations at every bend of the channel, and took the
387 courses and distances between those points from one bank to the other. subdivision of those lands on map 2, and the meandering of that slough was done in Dec., 1877, down to section 14; that is, down to section 14. In meandering that slough, from where the north fork enters Buena Vista Slough down to section 14, northward, I did not observe any place where there was no appearance of a channel. At a point just before reaching section 14 the slough widens, and the banks are not so prominent as they are above there or a little farther down.

Q—Down to that point, about near Section 14, on to

388 Section 13, are you positive that there was a continuous defined channel?

A—Yes, sir; I say to the north boundary of Section 24. They are all right together. At that point, the channel changes and widens out somewhat, and the banks are not perpendicular. It could be crossed easily, and it was more of a water way.

Q—Has the slough defined banks?

A—I would so term it; yes, sir; that is to say it was a channel; it was to be easily seen water would flow along that place. I could see that water had been along there; could see the marks of the water, with a sort of defined
389 margin. In running this meander line I was assisted by my surveying party; the same party that subdivided the land. I was at that time engaged in subdividing the swamp, a part of it known as swamp land District 121.

Q—How long did it take you to meander that section of swamp land, from the north fork down to 14?

A—When I would go through with one township I would meander it, and then, at another time, would meander the balance of it. I think there were two or three different times I was engaged at it. I presume the whole time devoted to meandering was two days.

390 Q—Altogether?

A—That is, the portion that is on this map.

Q—I am speaking of that down to Section 14?

A—Down to Section 14. That is to where the levee is, the portion that is above the levee, up about the north fork of New River. That was done at another time. I meandered it.

Q—Well, how was it below Section 14, as you got on down to Tulare Lake, north; what does that line represent that is marked along there, all along here in Township 29, South Range 23 east?

A—That line represents the channel.

391 Q—The same character of channel that you have been speaking of?

A—I mean that is the line of the slough, such as is represented there.

Q—Does that line represent the continuous channel?

A—It represents a continuous channel; that is substantially so; that is, varying in width, and changes some from what it is in the upper portion.

Q—Does it represent a channel with defined banks?

A—Well, as a general rule—as a rule it does.

Q—Is there any point where it don't as indicated by

392 this map? Does the map indicate any point that it don't?

A—I don't know that it does—the map itself.

Q—Then this is not exactly accurate in its representation as to that? These two maps that I am speaking of, from 14 to Tulare Lake?

A—It is this way about it: you can't always represent the truth upon a map, some things have to be explained.

Q—That is what I am getting at, the explanation, for fear that we might be misled by these marks. I was satisfied they were the ordinary ways of making marks by surveyors, and frquently they understood it better than
393 others looking at them. Then there was a continuous channel the whole route?

A—There was a traceable channel there. By traceable channel, I mean the water at low stage would pursue a certain course, such as represented there.

Q—At low stages?

A—At low stages; that is to say, it will not spread beyond the limits that are shown there.

Q—How was the water as you went down from 14 to Tulare Lake?

A—There was no water there.

Q—How did you find it?

394 A—That is at the different times these were made, understand.

Q—How did you find it as you approached Tulare Lake? How far did you go?

A—In saying there was no water there, I mean there was no running water at the time. There had been water in it and evaporated. It was not just at that time. The supply was not sufficient to cover it and to run.

Q—What time of the year did you make these surveys, from 14 down? The completion of this map was at one time and the other at another?

395 A—Yes, sir.

Q—Well, what was the difference of times?

A—Well, the first map, map No. 2, the time it was made was in the fall of the year 1877 and the early part of 1878—January and February, I think, and the first part of March—the early part of the year. Map No. 3 was made in April, 1881, I think; this present year.

Q—Well, how near did you go to Tulare Lake in April, 1881?

A—Well, I don't know just the distance.

Q—How far did this line go? Up to the lake?

396 A—No, sir; that doesn't run to the edge of the water at present.

Q—How far from it at present?

A—I don't recollect how far it was; it was not a great ways. As I understand, it was two or three miles. I think that was the distance they said it was.

Q—This appearance that you speak of existed all the way down, as far as this map goes; that is to say, there was a continuous defined channel?

A—Well, over the portion I surveyed there was such as is shown there.

Q—Was there a continuous defined channel from sec-
397 tion 14 to where your map ends here, on Tulare Lake, at the time these surveys were made?

A—Well, there is a portion of that map that was meandered on the west side, and it is shown there where the channels run out, it spreads and follows a channel, and it goes down and spreads over the country, over a flat surface that is shown there.

Q—There was no appearance of any channel there?

A—There was no appearance of any consequence; at least, we didn't consider it was worth following further.

Q—What I want to get at is, did the channel cease
398 there?

A—That portion upon the west side ceased where it is represented there.

Q—Where then did it take up again?

A—Then we went over to a point shown as Mud Slough—what is so called. Then this last channel was followed down to this little lake. It is dry now.

Q—In the meantime what was done with those channels?

A—At the time I was running along here there was what we call the Tule house located here, in Section 32, Township 25, South Range 22 East; and at the time I was
399 meandering the other slough bearings were taken to the Tule house, and from that the location was obtained. We went to the Tule house, and, in doing so, passed over here and began the survey there, and then followed along by this channel—the eastern channel—from the Tule house.

Mr. Flournoy—Q—How did you find that?

A—I found that as it is down there. The various widths and depths of the channel are given at the different points.

Q—It was a defined channel?

A—It was a defined channel all along, as it is shown

400 Q—No breaks in the channel anywhere?

A—In some places it spread over an area, and there are islands in there; but the banks, perhaps, are not so prominent as they are at other places. There is an island in there, and it is over in Sections 20 and 21, Township 26 South, Range 22 East. I don't know that it has any name.

Q—As you come down from the Tule House, did I understand you to say that you found a continuous defined channel or the bed of the stream the entire route?

A—Over a great portion of it it was so.

Q—Well, is there any of it that is not so?

401 A—There was a part of it that the channel was not so well defined as it was in the others. It was merely a water way.

Q—The question I asked you was, is there a defined channel continuous there that entire route?

A—There is a channel running through the entire route, where the water at low stages will run only along that particular line.

Q—Well, is there a defined channel, where water customarily or usually runs along the entire route, and a continuous channel?

402 A—There is, as I say, where water will run along that particular line.

Q—I understand water will run all along there when there is any to run, and when it is high enough. I mean there are some places where there is a defined channel, and some where there is not?

A—Yes, sir.

Q—I want to know if there was when this survey was made, in this month you speak of, a defined channel or bed of a stream continuously along that route, from the tule shanty down to this point of connection here?

A—The way that the slough is—

403 Q—Just please answer me?

A—Well, I can answer you by explaining it.

Q—I want it answered in my way, and then you can explain it afterwards. I ask you this question: Was there from the tule shanty down to this point of connection where you run down going back southward, a continuous defined channel or bed of a stream with defined sides and banks?

A—Not with well defined banks there; no sir.

Q—There wasn't?

A—No, sir; not with well defined banks.

404 Q—It presents the appearance that water had passed over it, at different places?

A—It is what would be termed a water channel I presume.

Q—But it did not have defined channels and banks. Was it defined at all, the sides and banks? You know what the bank of a stream is?

A—It was this way. There was a depression there of perhaps a hundred or two or three hundred feet in width, may be. The water would go into that and it would be several feet in depth, but the banks from the bottom would be uniform. They were started at the low-
405 est part and sloped gradually, so that the eye could not detect where they rose to the level.

Q—Suppose there was no water at all there. How would you know where the water stood or ran at that time? Did it leave its mark where it usually coursed? That is what I mean by the bank, where the water leaves its mark as a margin?

A—I think there would be no trouble at all in finding it. At the time when I was there water had been there and stands along there in places.

Q—I understand that that always happens. But I want to get at this point, whether there is anything that
406 shows that it is customary for water to course—to pass along the particular place. You can tell that. When Kern River was dry you could tell where the water went—when there was water there. I want to know if these margins or banks and bed of this stream are so plain that you could tell from here to there at every point? Not where you could imagine the water could go; but where the water had left its own impression by leaving banks and sides?

A—No, sir.

Q—Now did you run up this portion here, from the tule house to Section 3—up what is known as Salt
407 Slough?

A—No, sir.

Q—Now then, come down to this mud slough. You came down there to the tule house—what kind of a concern is that anyway?

A—I didn't come along that portion.

Q—You don't know what that exhibits?

A—Not from a certain point. We crossed it and know what it was at the crossing.

Q—Where did you cross it?

A—We crossed it at a point—I presume between

408 Sections 19 and 20—but didn't follow it down. We struck it about Section 12.

Q—Did you meander any of these sloughs? Which line was meandered after you left Section 14? After leaving Section 14 I see marks of sloughs all along in here, did you meander any of those?

A—No, sir; I did not meander the stream further than Section 14; I made the crossings at different points of the section lines. I ran out the section lines by the chain.

Q—And made your estimates as field work at the time?

409 A—Yes, sir; as field work.

Q—Have you the field notes? Did you make any field notes in this meandering?

A—Of that portion, yes, sir.

Q—Have you got those notes?

A—Yes, sir.

Q—Can you produce them in Court?

A—I think I can.

Q—I would be glad if you would do so. Did you ever make any survey heretofore of Buena Vista Slough, of any part of it?

A—I made the survey that I say, in 1877 and 1878.

410 Q—Was this map No. 2 made at that time?

A—No, sir; that particular map wasn't made at that time. It was made this month some time. I made a map of my survey in 1877.

Q—Have you got that?

A—I have not got it. I gave it to the Company; they have it.

Q—You would recognize it if you could see it?

A—Yes, sir.

Q—Is that a copy of it?

[Map "A" shown to the witness].

411 A—No, sir; that is not of the map I gave them; no sir.

Q—Did you make any surveys previous to that time?

A—No, sir.

Q—These surveys, then, that we have been speaking of are the only surveys you ever made around Buena Vista Slough?

A—I never made any surveys around Buena Vista Slough except those of which I have already been speaking, none except those made in 1877 and 1878.

Q—Did you ever see that map before [map "A" shown to the witness] or the original of it?

A—Not that I have any knowledge of. It resembles

412 a map I made. It is not a copy of any I made. It resembles one I made in 1878.

Q—Does it resemble this map No. 2?

A—They both represent, I presume—intended to represent the same country. It is not just as I made the map at all.

Q—Does this map number 2 represent exactly the map you made in 1878?

A- No, sir.

Q—In what respect does it differ?

A—The map that I made for the company does not show the slough so much as this does; and it shows
413 the section lines just as they are, and the levees and the weirs and matters of that kind.

Q—That is not an exact copy of the map that you made?

A—No, sir.

Q—Of any map that you made? The map that you made don't show the slough continuously that is the fact isn't it. Is it an exact copy of any map you made yourself?

A—I don't know that it is.

Q—Do you think it is?

A—It is like maps we made showing the country
414 generally.

Q—But does not in point of fact, differ from the map you made yourself?

A—It may, in many respects differ from it because it may show more than that did.

Q—Does it show more than your map shows?

A—In some respects it does and in others it does not.

Q—In what respect does it differ?

A—This was made to show the water courses through there and the other was not.

415 Q—This one was number 2?

A—Yes, sir.

Q—But the other was made by you from your actual survey?

A—Yes, sir.

Q—That didn't indicate the lines of the slough, as this map number 2 does?

A—No, sir.

Q—Then this one you made, number 2?

A—I made the map.

Q—You made this?

A—Yes, sir.

416 Q—And you didn't make this map from actual survey, but as a copy from your other map.

A—I took such portions of the other map as I needed, and from examination upon the field, I put it all together.

Q—But this map number 2, is not an exact copy of the other?

A—Not an exact copy. This is made for one purpose, and that for another.

Q—If you can find the map of 1878, I would like you to produce it; and also the field notes which you said you would produce.

417 A—I would say the field notes and the map, I gave to the Company, I can't produce them. The field notes I gave to the Company. They are the ones that can produce them.

Mr. Garber. Q—Did you ever make any map of which this [Map A,] is substantially a copy?

A—I have made a map that resembles very much. Perhaps there was taken a copy of it.

[The map referred to in last question, is marked "Map A."]

[Here insert Map A.]

418 Q—Then when was this map made, the original of this map, if there was such a one, when did you make the original of it?

A—I made it in 1877, I think. Partially from the same notes from which map No. 2 is made, as far as it goes, from the same notes.

Q—Now, then, for whom did you make a map, of which this is a copy [Map "A"]?

Mr. McAllister—He has not said he made a copy.

Mr. Garber—I say, if it is a copy, for whom did you make it?

419 A—I made it under instruction of Mr. Wible. He was the Superintendent of the ——. I made it in 1877. I think my instructions were to make a general outline map of the country.

Q—Did you make this map and give it to Mr. Wible?

Mr. McAllister. He didn't say that he made that map.

Mr. Garber. Q—You made a map, of which you think this is a copy?

A—I made a map resembling that some, showing a belt of the country.

Q—You think that map was a partial copy?

420 A—That map is a partial copy.
Q—When did you give it to Mr. Wible?
A—In 1877; it must have been in December.

AFTERNOON SESSION.

Mr. FLOURNOY. Did you succeed in finding those field notes?

A—No, sir. As I said, they are in the hands of the company; of the plaintiffs.

Mr. HOUGHTON. Do I understand you to say they are in the hands of the plaintiffs in this case?

421 A—I say the company what you call the Kern Valley Water Company. It was turned over to them by me. Turned over to the Superintendent. I think to Mr. Livermore—these surveys, field notes. This was some time in 1878. I don't know where they are now. The last time I saw them was when I turned them over in 1878. I have not seen them since.

[Further cross-examination suspended *pro tem.*]

RE-DIRECT EXAMINATION.

Mr. HOUGHTON. I understand you to say that you
422 have meandered this slough from the point where the North Fork of the New River runs in down to a point on section 14, township 29 south, range 23 east, where the slough divides?

A—Yes, sir. I mean that I have surveyed along its banks; taking the courses and distances of the bends. The condition of it down to that point is, it has various different widths and depths, and perpendicular banks as a rule. The distance from between those two points, without following the meander line would be 13 or 14 miles,

Q—Then I understand you to say from about that
423 point when you ran this survey in 1877 and '78, and ran section lines through this swamp land, that you located the slough or sloughs that you came across at every point where they crossed the section lines. Is that so?

A—Yes, sir.

Q—Did you, in connection with that, give at these points the width of that slough?

A—Not always. On the map which I made for the Kern Valley Water Company there only appeared the survey of this stream down to a point where I stopped meandering, and below that point there was nothing

424 in the plat to show the meanderings of that slough or the crossings of that slough. The balance of the work done by me in the field to enable me to plat this slough from the point where it was dropped in 1877 and 1878, has been done within the last three weeks. A portion of it was done by actual work in the field. That portion I had subdivided was done by going into the field with the outline in my hand and finding the corners, some of them, and from that, filling in from such as I had. The plats or maps show the crossings of the sloughs below Section 14, at the very point where I located it in 1877 and 1878, and the filling in
425 has been done by examination between those points.

Q—Now, Mr. McCray, what is the condition—we will take the slough in sections—what is the condition of the slough starting where you left off your meandering in 1877 and 1878 down to the point where you had represented the two channels as meeting at the north end of what we have marked as Weed Island. What is the condition of that slough on the east side of Weed Island?

A—As it now is, the channel is of different widths and also of different depths. In some points it is quite prominent and at others it spreads out over several
426 hundred feet, perhaps, and it is so through a good portion of it. It alternates from one to the other.

Q—Is there a well defined channel between the point where you left off the meandering in 1877 and 1878, in Section 14, down to the point where the two channels come together at the north end of Weed Island?

A—There is a well defined line showing where the water runs; but at some places it is quite deep and has steep banks; at other places is spread over the ground at different widths of several hundred feet, and the lowest place is in the middle of it, a sloping bank
427 from there to the levee.

Q—How far is it from the point where you left off meandering in 1877 and 1878, down to the north end of Weed Island?

A—Weed Island is a point I have not definitely established. According to that map it is about two miles from the north end of Weed Island, and of that two miles probably one-half of the channel would be with banks and a deep channel.

Q—Then take the point where the two streams come together—the two sloughs come together at the north

428 end of Weed Island, and run down to the township line between Townships 28 and 29, what would that distance be?

A—Three or four miles—about three miles.

Q—What is the nature of the channel between those two points?

A—That is about like the last; I should think more than one-half of it would have well defined banks, and the balance of it would have a channel in which if you should run a moderate head of water it would flow and go ultimately up to the portion which had well defined banks. That is also true of the slough between the
429 place where I left off meandering to the north end of Weed Island. The average width, I should think, of the channel between the points where I left off meandering in the township line, between Townships 27 and 28 South, is in the neighborhood of 35 to 40 feet, I should think; where it has banks it would average 30 feet, I should think; I think that is about the average width of it where it has steep banks; I don't believe it is hardly so wide as that; I think that is the average.

Q—How wide would it average where it has banks?

A—Say 30 feet; where it has the sloping banks I speak of, not perpendicular banks, I should think it
430 would average 150 feet. There are also a number of other channels running through there, but they are generally on both sides; there is a channel that carries deeper water than elsewhere; in passing through it I have noticed it.

Q—Are the two channels where this division takes place, of Buena Vista Slough, correctly delineated—that one on the west side of this map?

A—It is delineated by going over the ground.

Q—Is it correctly delineated?

A—It is generally correct; it crosses the section in the manner that is shown there.

431 Q—It crosses the section at the correct points?

A—I think so.

Q—Doesn't this on the west side of Weed Island cross the section there by actual survey?

A—That does right there, the channel running on the west side of Weed Island is of different widths. I hardly know the width; it is quite varying in width, may be 150 feet, may be wider than that; may be not so much; there is not a great deal of the west channel that has perpendicular banks. I should think there would be fully one half of it that ran in a divided

432 channel, but not so prominent as the slough which I meandered. The balance of it runs over or runs through land that is lower. I don't know hardly how to describe it, but it is so low as to confine it and keep it from spreading out. It runs over the ground that is low.

Q—What is the condition of the channel running through the next township, north of the one we have been speaking of; are there two channels to the slough running through there, that is through T. 28 S. R., 22 E. Now what is the condition of the sloughs running through township 28 south, range 22 east; and are there
433 more than one?

A—Yes, sir, there are more than one running through it. The main channel commences at the southern boundary of Sec. 36 in T. 28, S. R. 22 E., and the channel is quite prominent, some places 6 feet deep—has a varying width of 30 to 60 feet, or may be 75 feet wide. The first pond that appears on this map is down about 2 miles from the township line, or more. Then from that point there is a connection between it and what is called Fish Pond, and that is perhaps half a mile; and there the banks are not quite so prominent. When full of water it would be perhaps 4 feet deep
434 where it is confined to the channel. From Fish Pond down to another lake, a mile and a half, the channel is quite prominent, having perpendicular banks, and very deep. The time I was through there I could not cross it, as it emptied in the lake. From that lake there are other channels that run out. This is what is considered the main route, and this is a channel of various widths. It leaves the pond on the east side of Sec. 22; then runs through what you might say was the tule grounds, and runs through Sec. 22; forming another slough, which is quite prominent, running off, say about half a mile. Then that slough exhibited upon the map,
435 it runs in from lakes there at Sec 13, across a portion of 16; the N. E. corner of Sec. 16; and goes diagonally across Sec. 9, and joins another slough upon the west boundary, north of a well that used to be used for cattle. It continues on from the limit of this map and runs through Sec. 3 and a portion of Sec. 4.

Q—What is the condition of that slough from the point where it leaves the lake you have spoken of, down to where it reaches the township line?

A—Well, this part where it first leaves the lake, the channel is not so well defined -not so prominent as that part that is mentioned.

436 Q Don't make comparisons. What is the condition of that channel?

A—It runs over low ground, sometimes over 200 or 300 feet wide, in some places not so wide; may be not even 50. When it is full of water, in some places it will be 5 or 6 feet deep, and in others might not be over 2½ or 3 feet. After it joins the other slough it is more marked, having a width of 100 feet and a depth of 3 to 5 feet; the banks are sloping and not such as could be crossed easily in a wagon, at all points being quite steep, but sloping from the northward, and the channel goes into this Section, 15, and runs into a la-
437 goon. It has not what you would call well defined banks. It runs over low ground, and also when it leaves it running from that point to the west side—say a mile and a half. The channel is varying. In some places it is marked—still running into the lagoon—and it is very deep; this crosses the line between Sections 9 and 16. In continuing across Section 9 it has different widths and different depths, but as a rule the banks are very sloping, but could be easily crossed with a wagon. The channel, where it runs through Section 9—its depth is about like the rest of it—is about 3 to 5 feet deep in different places. The
438 channel, as it runs, continues on through 4 and 5, and is of the same nature as that running through Section 9. Taking it generally it is the same kind of a stream where it runs into this Lake, and where it runs out of it has quite a wide channel, is about 200 feet wide and I should think 3 feet deep, and about the same where it runs out. There is another channel running through this township, and along the west line of the swamp and overflowed land. That is what is called Blind Slough. At some places it is quite marked and at others it is not. It runs out of Buena Vista Slough in Section 4. It is fed by the waters of Buena Vista
439 Slough.

Q—Will you give the sections where that main branch of Buena Vista slough after it leaves the point where you left ~~over~~, meandering in section 14, following the main branch of it?

A—It runs through the N. E. corner of Section 15, along the south boundary of Sections 9 and 10, through Section 8, through the N. E. corner of Section 7, diagonally across Section 6, all in T. 29, S., R. 23 E. It crosses the township line runs diagonally across Section 36, and through Section 26, the same way across

440 Section 22, through Section 15, touches the N. E. corner of Section 16, runs diagonally across Section 9, to Section 8, through Sections 4 and 5 to the township line of 28, S., R. 22 E., all in Township 28, S., R. 22 E.

Q—Now take the channel that appears upon No. 3, which is the main channel of Buena Vista Slough, crossing at Township 27 S., R. 22, E?

A—The one running through Section 32, I should consider the main channel. That is a continuation of the one I have been following.

Q—What is the condition of that channel from where it leaves the south line of that township to
441 where it reaches the north line of the same township 27 S., 22 E?

A—It has a channel of varying width, like the portion in the other township. At some places it spreads over the ground 500 feet, and then narrows down to a deep channel, in some places it is 100 feet wide by 10 feet in depth and then may be 60 by 3 or 4 feet in depth. In some places perhaps narrower and more shallow. Where it crosses the south line of township 27 S., R. 22 E. I should think the channel was 100 feet wide. I am speaking of the main channel. This was the channel that was considered the main channel.
442 This channel I don't know that it is the main channel, that middle channel starts upon the south line of Section 32, runs north through that Section and crosses into Section 28, running into Sections 21, 16 and 9 and through Section 4 to the township line. The average width of the channel through that township is, I presume, 100 feet, and the average depth between 3 and 4 feet, I should think.

Q—What portion of that channel, 6 or 7 miles as the case may be, has well-definded banks?

A—There would be two-thirds of it.

Q—What would be the condition of the other third?
443 A—The other third ran over ground where the banks were not so well defined; over low ground, various widths; may be 100, 200 or 300 feet in width. The other branch of Buena Vista Slough that runs through the township last mentioned is a shallow slough of different widths, bordering on the west side of the swamp, and of different depths; it might be from 200 to 300 feet wide, and from 2 to 5 feet deep.

Q—Is that a well-defined channel?

A—Not so prominent as the other channels. It is a channel that you cannot mistake when you come into contact with it, when there is water in it.

444 Q—What is the condition of the eastern channel, that runs through that same township?

A—Taking it through the entire township, it is not so well defined as other sloughs. In some places it is very prominent, but not as a rule.

Q—What would be the condition of it where you say it is not so prominent as a rule?

A—Well, where it has sloping banks, and runs through a slough or hollow, is a waterway like, confined within certain limits, during low stages.

Q—What is the condition of this eastern channel that runs through that same township?

445 Mr. GARBER. That is what he has been speaking of.

Mr. HOUGHTON. No; he was speaking of the western; I spoke of the eastern, but he went on talking about the western.

The WITNESS. In some portions of that it is well defined. In others it is like the other sloughs.

Q—What portion of it has banks well defined?

A—Perhaps there is no Section there at all that it runs through entirely—33, 28, 32, 15 and 10—on some of them it is quite prominent, at other places it is quite shallow.

Q—Then take the next township 26, S. Range 22 E.,
446 will you take the main channel at Buena Vista Slough that runs through that and follow it through the Sections, through what Sections does it run?

A—On the south boundary of Sec. 32, in Township 26, Range 22, then it runs through Sec. 33; the west portion of it. Then through the west portion of 28; then diagonally across 20, and across 18 and 7, touching 8, runs diagonally across 5, and northwesterly and diagonally across Sec. 32 in another township. The north line 5 giving the township line. The condition of the slough through that township is quite marked
447 and prominent a great portion of the way; that is the eastern slough I refer to, and through T. 26 S., Range 22 E. The average width, I should think, would be about 80 feet, and the depth 3½ to 4 feet.

Q—What portion of that 6 or 7 miles running through there has well defined banks?

A—There is almost all of it, and the portion that has not well defined banks is where it divides, running around an island, or something of that kind, forming a small island during low water. During high water, perhaps the island is covered in many places, where it would have a width of several hundred feet; where these

448 islands are, as a rule, the banks are not so steep as the places where it is confined to one channel.

Q—That is where it comes to an island it runs on both sides?

A—Yes sir. The western channel ran through this Township 26 S, Range 22 E., is a well marked slough. It is of different widths and has different depths, and it will average something like the other, perhaps 80 feet wide, and from 3 to 4 feet in depth.

Q—How much of that 6 or 7 miles has well defined banks?

A—Well, I should say about nine-tenths of it.

449 Q—And what is the balance, the other tenth; what is the condition of that?

A—Well, it is also a slough, but not so prominent, perhaps, as the nine-tenths. Nine-tenths of it is a very deep slough.

Q—Will you trace that western slough through the different Sections, the western channel?

A—Beginning at the south point of line of Sec. 31, it runs northerly through it, touching Sec. 30 and a portion of Sec. 25, which is in T. 26 S., R. 21 E. Thence from that point continuing through that T. 21 S., R. 26 E., running through Sec. 24, through the east-
450 erly portion and western portion of Sec. 13; through the eastern portion of Sec. 12, and the eastern portion of Sec. 1, to the township line. These last Sections are in T. 26 S., R. 21 E., except some portion of Sec. 21, where it touches 26, I only surveyed this slough in Sec. 25 S., R. 22 E. to the north boundary line of Sec. 32 Over that portion it is a very wide, deep slough, having perhaps an average width of 200 feet. It now has water in it, and at most all times is swimming for a horse. I only surveyed to the north boundary line of Sec. 32; it was really surveyed only to the Tule house, which is near the north boundary line of
451 Sec. 32.

Q—Now, take the west branch of Buena Vista Slough when it runs through T. 25 S., R. 21 E.; what is the condition of that?

A—It is different widths, but as a rule is quite narrow. There is a channel running along there. It is easily to be seen. It may be 20 or 30 feet, possibly wider than that, and one, two or three feet, may be four feet in depth. Then again, there appears to be a margin on each side of it, of several hundred feet in width. The waters would have to get high before they

452 would leave it in a great many places; not always. In that township the main channel of Buena Vista Slough is the easterly branch. That is what I considered the main channel. That slough run through the westerly portion of Sec. 36 and 25 S., R. 21 E., through the westerly portion of 25; also through Sec. 24, and runs diagonally over 14, spreading out into indefinite channels.

Q—Now take the channel from the time where you stopped meandering in 1877 and 1878, right down through; take the main channel of Buena Vista Slough, and follow it right through, is there a well marked water course from one end to the other?

453 A—Yes, sir; that is, there is a course there that shows that the water runs along there.

Q—If you should turn into Buena Vista Slough, a regulated and moderate head of water, enough to go through from one end of the slough to the other, is there a channel that that water would run through before it would spread out and cover the body of swamp and overflowed lands?

A—I think not. That is it would spread over a portion, not all of it.

Q—I say cover the body of swamp and overflowed land?

454 A—Would cover the entire body.

Q—Is there a channel, that if you should turn a moderate head of water in it, not enough to flood the whole lands; turn a moderate head of water into Buena Vista Slough, a regular head of water, would that follow the channel right down through to Tulare Lake?

A—It would follow the channel.

Q—Without overflowing the body of the lands?

A—Without overflowing the majority of it. Yes, sir. I should think so.

Q—The counsel say, you say, "I should think so." I want to know whether, after making that survey that

455 you have made there, you can say that there is a channel; that if you should turn a regular supply of water in there. sufficient so that it would go to the waters of Tulare Lake, what would be the widest point—how wide would it spread out at any given point?

A—Well, I don't think it would exceed a quarter of a mile; I think the water could be so regulated and turned down there that it would not exceed a quarter of a mile.

Q—At any given point in the whole length?

A—Yes, sir.

456 Q—So that there would be a running stream right through from one lake to the other?

A—Yes, sir.

Q—How deep is that slough, from where you commenced to meander it at the mouth of the north branch of the river, down to where you stopped meandering it?

A—It is of various depths; in many places the water never leaves the bottom; I, of course, could not estimate what the depth of that was; I should think it would average five feet in depth, perhaps more than that.

Q—How wide?

457 A—It will average 60 or 70 feet.

Q—Is there any point through that whole distance—I think you fixed it at fifteen miles—where there is not a well defined bank, down to Section 24?

A—No, sir.

Q—Will you trace that line, and give me the sections that it passes through from the time it strikes the red line, or red land, until it reaches a point—go through these townships, beginning with 30, Range 24?

A—It runs northerly through Section 10, through the centre, and a portion of it runs through the west
458 half; then across the southwest quarter of Sec. 3, and through the middle of 4; then northwesterly through the northeast quarter of Sec. 5—all of said Sections being in that township; then in T. 29, S., R. 24 E., through the southeast quarter of Sec. 32, it runs diagonally across that northwesterly, touching Sec. 31 and Sec. 30, then touching the other township, 29, S., R. 23 E., near the northeast quarter of Sec. 25, and then running northwesterly across Sec. 24.

Q—Then comes in Sec. 14, where you stopped meandering?

459 A—In 14.

Q—I notice that in this map you put certain figures along these sloughs. What do those figures indicate?

A—Those indicate the width and depth at the points where those figures are. The first figures of those along the sloughs indicate the width of the slough at the point where they are put on, and the second the depth.

Mr. Houghton. Yes, sir. At the adobe house the slough is 200 feet wide and 16 feet deep?

A—It was so represented to me; as being that depth by persons who were acquainted with the locality.

460 Mr. GARBER. That is not evidence.

Mr. McALLISTER. Of course, what is heresay is not evidence.

Mr. HOUGHTON. Q—How about these depths and widths the balance of the way. How did you ascertain these?

A—I ascertained them by measuring in some places and in some places by estimating.

Mr. GARBER. Q—And some places by what people told you?

A—I don't know whether there was more than one place where I took the statement.

461 Q—And this was full of water?

A—Yes, sir. Not full of water. Deep enough to swim cattle.

Mr. HOUGHTON. Q—Take the place marked "16 feet deep." How deep was it down to the water where you saw it?

A—The banks above the water were five feet at that point.

Q—How are these other estimates and measurements? Made by yourself or statements you obtained from other people?

A—Made by myself in going along over the ground.

462 Mr. GARBER. Q—When did you say those places were full of water?

A—Two or three weeks ago. They were not full of water; but water was in them at various places.

Mr. HOUGHTON. Q—You say that when you made that red line around these lands, you made it to include the lands in a schedule that was handed to you? I will now ask you to look at that. [Showing schedule annexed to the original complaint.] And see if that is a copy of the same schedule that was handed to you?

A—I think it is, sir.

463 Q—Did you have a copy of this schedule?

A—Yes, sir. A copy was given to me.

Mr. HOUGHTON—I will read this description. [Reads from schedule attached to the amended complaint].

Q—Have you got the fractions included?

A—Yes, sir; everything is included. I took the meandering as surveyed by the government.

[Mr. Houghton continues and completes the reading from the schedule].

Q—All of that land is embraced within the red lines upon that map?

A—Yes, sir.

464 Q—And it contains nothing outside of that?
A—No, sir.
Mr. McAllister—That is, the red lines on Maps 2 and 3.

Re-Cross-Examination of

F. P. McCray.

Q—How was this map made by you? By any actual survey? This map No 3.
A—No, sir.
465 Q—You didn't make any of those red lines from any actual survey at all?
A—No, sir.
Q—Then you don't know whether they are right or wrong?
A—I know that embraces the lands in the schedule.
Q—According to what?
A—According to the schedule.
Q—Did you make this map? Where did you get the information from?
A—I got it from a schedule that was given me, and from other maps.
466 Q—The schedule has not got any map in it?
A—I got the information so as to make a map.
Q—From other maps? You don't know anything about it yourself? You don't know that the map is correct or not?
A—I know it embraces the land that is given in this schedule, according to the schedule itself.
Q—According to the schedule and maps furnished you?
A—No maps furnished me. I took the maps of others; maps that I had; maps of record in this County.
467 Q—Did you have any information of your own knowledge, from actual work, of any of this country you have marked with red lines?
A—No, sir.
Q. You had a map that this (map 2), purports to be a copy of?
A—Yes, sir.
Q—That you stated was not an exact copy; where is that map? When did you see it last?
A—That map was turned over to the Kern Valley Water Company. I saw it last within the last week or

468 two, at various times. I have seen it three or fourdays ago, perhaps.

Q—In whose possession?

A—I don't remember now.

Q—Whose individual possession have you seen it in?

A—I don't remember.

Mr. HOUGHTON—I have got the map.

Mr. FLOURNOY—Will you introduce it?

Mr. HOUGHTON—I don't know whether I shall or not.

Mr. FLOURNOY—We ask you to produce it if you have got it, will you produce it?

Mr. HOUGHTON—If you want the map you can have
469 it. I don't know whether it is here, or down at the Hotel.

Mr. FLOURNOY—As to that part of it, I will not examine just now as to that particular branch. I would like to suspend the cross-examination of this witness, until we can get that map.

Mr. HOUGHTON—I know that I have the map, and I can get it.

Mr. FLOURNOY—We will suspend the cross-examination of this witness, until we can get this map.

470 JAMES C. CROCKER,

A witness for plaintiff, being duly sworn, testified. (To Mr. Houghton.)

I reside in Kern County; I am one of the plaintiffs in this case; I have resided in Kern County since 1868, since 1869 permanently.

Q—When did you first become acquainted with the lands through which Buena Vista Slough runs?

A—I first saw them in 1854. I then came up here with a band of cattle from Los Angeles.

Q—Where did you first strike the lands of Buena
471 Vista Slough at that time?

A—I struck the slough near the point of hills which make into Buena Vista Slough. Not exactly at the point, but north of the point. That was north of Buena Vista Lake. Where we got over the point of hills there we were right on Buena Vista Slough. From that point on the slough we went back on the opposite side of the hills, and camped.

Q—What was the condition of the slough at that time that you first saw it?

A—Well, it was a wide slough, deep, and a plenty of water in it. It was running a strong current; not a

472 rapid current, but a strong, deep current. It was running from Buena Vista Lake north. That was the only time I saw Buena Vista Slough that year at that point. The next morning we struck it perhaps half a mile or a mile further north, when we crossed back with the cattle. The condition of the slough there was about the same as where we first struck it. That was in August. We then kept right on traveling down the slough from that clear to Tulare Lake. We followed right along the edge of the slough at night, on account of the mosquitoes, back as far as we could get conveniently, and camped. The water, from the time we struck
473 Buena Vista Slough at the point of hills, we found very deep as far down as we followed it, until we came to the tule country; and as far as we could trace the open slough it was a very deep slough and a rapid current, so deep that our cattle got into it at one place, and some of them went across. I, among others, went across on the tule boat. We undertook to cross on a tule boat, but could not. Afterwards one of the men swam across, and carried a rope across, and we crossed back and forth on that rope, and pulled our horses over; got the horses and cattle, and brought them back. It was that that detained us the first night when we struck the
474 slough. We then went down the slough with our cattle. I could not tell how many camps we made going down the slough, but I think we camped three or four days on the slough. We lost our horses. I think altogether we must have camped eight or ten nights.

Q—What was the condition of the slough all of the way down?

A—It was full of water.

Q—You say you camped eight or ten nights; would that be at eight or ten different points?

A—Except three nights; we camped three nights in one place.

475 Q—At that time did you cross the slough at all, except at the head?

A—Yes, sir; we crossed one slough; we crossed from the outside to get food for our cattle. There was no feed on the plains, and we went from the outside across the slough on to the high land on this side the channel, on the east side. I could not tell exactly where that was, it has been so long, but I think I could tell very nearly. We crossed over on to some high land; as near as I recollect I think it was an island that I went on to at that time with the cattle, but I would not be positive.

476 Q—How deep was the slough where you crossed at that time?

A—We did not find any bottom at that time. We swam across on our horses, and swam the cattle across. We crossed the slough at no other point except there with our cattle. We took our horses across at other points, at two or three different points below that. There was one place I recollect well. We took our cattle through a flat country, and we crossed the tules and flag. I think it was a quarter of a mile of that, and came to a channel—a current of water—and swam that over on to a high mound. We were directed to that
477 point by seeing elk on the high land. I don't remember what we found when we crossed it the third time, but I know we found deep water.

Q—At that time, every time you struck the slough and crossed it, did you find moving water?

A—Yes, sir; running water, and running north. I next visited the slough in 1855. I went there with a drove of horses. I struck the slough a little south of the point where I struck it with the cattle, or near where the slough leaves Buena Vista Lake. I think that was, as near as I can recollect, in September, or perhaps October. The slough was about the same at
478 that point as when I first saw it. At that time I did not cross it at that place. After striking it we followed it down the same as before, and camped. We followed it to Tulare Lake, on the northwest side. We camped in the vicinity of the slough some five or six nights. At that time we did not cross the slough. We went into it to water our horses. We had no cattle.

Q—What was the condition of that slough at that time, or where you struck it down to Tulare Lake, as regards being full of water, and a current?

A—The water was not so high as when we passed the year before; still there was a great deal of water in the
479 swamp.

Q. Was there a current?

A—Yes, sir; there was a current, the same as the year before, running north. I visited that slough again in 1856, the next year. It was during the winter season, about January I think; that was two or three months after I had been there before. I struck the slough at the time about opposite where the canal camp is now, opposite Tracy's Crossing.

Q—Wible's Crossing?

A—Yes, sir. I think that would be about eight or

480 nine miles north of where Buena Vista Slough leaves Buena Vista. I there met a band of sheep I had coming from Los Angeles, and turned back to the San Joaquin. I did not follow along the slough. We kept on the plain.

Q—What was the condition of the slough at that time at that point?

A—Well, it was a slough running a plenty of water in it. That was the only point I struck the slough at that time. I again visited Buena Vista Slough in 1868. Between 1856 and 1868 I had not been there. I think it was in March, 1868. I struck the slough near
481 where Baker's Dam was put in, and south of the present mouth of New River.

Q—What was the condition of the water at that point at that time?

A—There was a great deal of water running in there; there was a large amount of water. Without striking through there we went with Mr. Broder, and a party that came up from Visalia to a rodeo, on the west side of the slough and lakes.

Q—Did you strike the slough at that point?

A—Yes, sir. I crossed it right at the old Baker Dam, where the Baker Dam was put in; we made a
482 crossing by extending a rope across the slough and building a tule float, and then taking hold of a rope and pulling the float back and forth across the slough. We went over there and followed the slough to a point six miles south of Tulare Lake. on about Sec. 1 (indicating the point on map 1). It was not that far at that time. The lake at that time extended back this way much further than it does now. Sec. 1 is in T. 25, R. 21. We came up around by Visalia and camped on the east side of the swamp land there; came from Poso Creek, and then we came up to Goose Lake. We crossed Kern River opposite to where Tracy's house
483 stands, west of the Said place.

Q—Will you locate that?

A—I don't know that I can on the map. I thought I could. It is somewhere about that point.

Mr. Garber—How would you designate it by figures?

Mr. Houghton—You are mistaken about that.

The Witness—Here is where Kern River run at that time.

Q—There was a flood there?

A—Yes, sir; the flood of 1868.

Q—You crossed there, you say?

484 A—We crossed about that point with a boat. We crossed on about Sec. 24, I should say, in T. 29, R. 24 E. We crossed the present channel, I think, somewhere near where Tracy's Crossing is now, on New River. I don't know that I can locate it exactly. I am not familiar with the surveys there of the land. The river at that time was a narrow stream, but deep and swimming. We swam across it and floated our wagons across. From there we passed on to Buena Vista Slough, near where the old Baker's Dam was, and continued to the other side. We then went on down the other side to a point where the high land was,
485 which I have pointed out on the map. I think we stopped one night on our way down. We did not go to the Buena Vista Slough at any point between where we crossed it and where we left it. Where we left it there was a big slough; a very large slough. The waters were very high, and they were receding; not so high as they had been. I think that was in March. I am sure it was in March. I next visited the slough in 1869. I came in February. I came up here to see the ranch where I am still located in business. I bought it at that time. I refer to the Templor, not this property. That is about fifteen miles west from Buena Vista
486 Slough, in the foothills. That time, coming up, I did not go to the slough at all. After getting up, I think about March, I commenced to gather my cattle.

Q—At what point did you strike the slough when you wanted to gather cattle?

A—When I gathered cattle, as near as I can recollect, it was about where the headquarter camp is; Wyble's camp. That would be about eight or nine miles south of where the slough leaves Buena Vista Lake. That was in March 1879.

Q—What was the condition of the water at that time?

A—The water was very high—a great deal of water
487 in the country. We remained there one night. Didn't cross the slough at all. We then went north, following the slough north towards Tulare Lake; very near the same point that is pointed out on the map.

Q—That is very near to Section 21, in Township 26 South, Range 21 East?

A—I don't think we went quite as far down as that, but very near. We were about three days on the slough that trip. We did not water our cattle along, because it was in the spring season and they did not want water.

Q—What was the condition of the water in the places

488 on Buena Vista Slough, where you struck it from headquarters camp down to where you left it?

A—The water was high. The country was pretty much under water. The water was high in the slough at the time. After reaching that point we went to Cottonwood, or Polonia.

Q—When did you again visit the slough?

A—I could not tell you exactly when I visited it, but I have been on the slough from that time up to the present time. I probably got back the same month. I was continually working after that time off and on. I have been there more or less the most of my time since,
489 every year. I have been raising cattle and engaged in the stock business.

Q—Between what points have you ranged your cattle on that slough since 1879?

A—Well, we have generally ranged them between the —in former years, from the Buena Vista Lake they ran to Tulare Lake; and some scattering cattle even further north and further south than that. That was where we calculated to keep those cattle—within those bounds. I was here in the fall of 1869, and there was plenty of water in that fall then. There was water the whole length of the slough. The slough was full of
490 water in the year 1870, whenever I went into the slough. I did not cross the slough in 1868 or 1870. In 1871 it was full of water. There was a great deal of water in it.

Q—Was it running all the time?

A—In 1871, oh, yes, sir.

Q—In 1871?

A—Yes, sir; it was full of water.

Q—What was the condition of that slough as regards there being running water down there, down to the year 1876?

A—There was water there constantly until the year
491 1876.

Q—All the time?

A—Yes, sir; I never saw it without water running there.

Q—You say during the year 1869—I understand you to say 1870, you never crossed that slough with your cattle?

A—No, sir.

Q—How about 1871?

A—I think in 1871 we commenced working in the swamp. We were attracted in there by seeing cattle on

492 the high points—cattle that had been surrounded by high water, and we commenced working in there to take them out. I was through the swamp considerably in that year, in 1871; also in 1872.

Q—What were you doing on the slough with your cattle from 1872 to 1876?

A—We were raising cattle—working with cattle all of the time. When I first went there we estimated to have about 1,200 head of cattle. That was in 1869. I could not tell how many I had in 1876. I had bought a great many and raised a great many. I could not make an estimate. We might have had 10,000, or might have
493 had 15,000; I could not tell. I think we had at least 10,000 cattle. We were in those times taking cattle away, and bringing cattle there, during that time. I suppose we had about the same number during the years 1873, 1874 and 1875 as we had previously.

Q—Were you running those cattle on this land in suit?

A—Not all of them, but the greater portion of them. We had some portion of the cattle that we had raised in the hills, and we used to take them down there, and drove them to the swamp; but they would not stay there. They would go back to their range, where they
494 were accustomed to ranging.

Q—In working in that swamp, as you style it, Mr. Crocker, with your cattle, from the year 1869 to the year 1876, were you all through that swamp, and crossing the channels?

A—Yes, sir; I think I have been on every acre in in that swamp, from one end of it to the other, at different stages of water. At high water, of course, I was not in so frequently.

Q—In handling your cattle there would you cross it from one side to the other?

A—Yes, sir.

495 Q—How many years have you been accustomed to crossing Buena Vista Slough from one side to the other?

A—I think we commenced crossing there in 1870 or 1871. I would not be positive. I think it was either 1870 or 1871 that I first commenced to cross the swamp. We did not go through the entire swamp. I think in 1871 we went clear across. In 1870 we did not go through the entire swamp. It was considered impossible to go through; but I have been crossing there ever since. I have crossed at all points most that there are

496 on the map, with bunches of cattle, back and forth. In low stages of the water I have not been particular; crossed from one side to the other. In high stages we had certain places to cross.

Q—In crossing that slough, as you say you have, at all times of water, haven't you ascertained where the channel that runs down through there is located?

A—Very near. I could not tell it by survey; I know by the general lay of the country where it is, from one end of the swamp to the other.

Q—Will you look at the diagram marked "3" there, and see if those channels are correctly delineated on
497 there? This map starts at a point just north of Goose Lake.

A—I should judge that was about correct. I would not be positive, but I judge from what I know of the general shape of the swamp land there, and the shape of the sloughs.

Q—Do you know where the lines of that swamp and overflowed land, within that territory, run?

A—Portions of it. I did not survey it. I know only by stakes which I have seen down through on the margin of the swamp, and through the swamp.

Q—Do you know that these sloughs, the two differ-
498 ent branches of Buena Vista Slough represented here, ran through your land in T. 26 S. R. 23 E.?

A—I just know they ran through our land.

Q—Do they run through the lands described in your complaint in this case?

A—I could not tell you section for section.

Q—They run through?

A—They run through that body of swamp land and sloughs, I should judge, about as they are laid down there, but I could not tell you?

Q—They run through the swamp land there that you owned?

499 A—Yes, sir.

Q—In that township?

A—In that township.

Q—How is that as to the township below, that is 25 S. 22 E. Did they run through the section that you have on the south line of that township?

A—They run through the sections. They run through this portion here. I know I helped to run those lines around this portion of the land here. I ran up, I think, about—I would not be positive—I think we run to this township line.

500 Q—Do you know that slough, Buena Vista Slough, runs through the swamp that you owned, or that the plaintiffs in this case owned in Township 25 S. 21 E.?

A—Yes, sir; I know it runs through our lands there. I run through the swamp, and I suppose I have always seen the stakes there that was laid off as our land.

Q—Do you know where the limits of your swamp and overflowed lands are on the east and west?

A—Yes, sir.

Q—Do these channels of Buena Vista Slough run between those limits?

A—Yes, sir.

501 Q—I don't suppose you could tell the exact section it runs through?

A—No, sir; I could not.

Q—But it runs through the body of the land?

A—I known the swamp land. I have seen the corners at different points, but have never traced them out.

Q—How is that as to the sloughs represented on this map, No. 2? Do you recognize these?

A—Yes, sir.

Q—Have you ever been on Buena Vista Slough from where it leaves the lake to where it divides at the point, going around Weed Island?

502 A—I have.

Q—And then followed it down as far as the range line between 27 and 28?

A—Yes, sir.

Q—Do you know whether that slough runs through the lands belonging to plaintiffs, that is described in this complaint?

A—Yes, sir; I have seen portions of that land run off, and I know where it is.

Q—In crossing that Buena Vista Slough, when you first commenced to cross it, what was the condition of it as regards the depth of water?

503 A—It was swimming, nearly every place I found it. Whenever we struck the slough, we struck swimming water.

Q—How wide did it appear to be at that time?

A—It differed very much. We only had particular places to cross it at that time. At the time of high water, when I found the channel, or the crossing place, we generally confined ourselves to that place more particularly.

Q—How as to after years, down to 1876?

A—When the water commenced to recede, we then crossed the slough at various places.

504 Q—In crossing, how about finding a channel there?

A—Well, the water was up in the sloughs so, that the sloughs, were generally full there, but there was always a channel. We never missed finding a channel.

Q—At how many different points do you suppose you have crossed that slough between the extreme north line of your land and the south line, near Buena Vista Lake?

A—I suppose I have crossed it on every section that there is bordering on the slough; perhaps every half mile.

Q—Did you cross it at all different stages of water?

505 A—Not at all different stages of water; only in particular places. At certain places we crossed it in very high water.

Q—Have you been on that slough when there was only a moderate height of water flowing down it?

A—I have.

Q—When that was so, how would the water run through Buena Vista Slough?

A—It would be more confined to its banks. Where there was prominent banks the water would be confined to those banks. Then, where the banks were not so prominent, the water would spread out more.

506 Q—When a moderate head of water is running there, it will be confined to the banks where you speak of; those well defined banks? How much territory would be spread over where the banks were not so well defined?

A—It varies considerably. In some places it would spread over from one-fourth to one-half a mile, and in other places it would spread only very little, if any. It would leave the tule lands on both sides out of water in many places. In many places it would flow back.

Q—If you should turn a moderate head of water into

507 that slough, so as to fill those channels where they are well defined, would there be a continuous stream right through to Tulare Lake, without overflowing the body of the land?

A—Yes, sir.

Q—When was the first time that you ever saw that slough without any water running in it?

A—In 1876 and 1877. In 1877 and 1878 there was water in through the fore part of the season, in the upper part of the swamp.

Q—What was the reason of there being no water there in 1876 and 1877?

508 A—Well, it was a dry year, was one cause; and another cause was that there had been more water taken out of the river than in previous years.

Q—How was it in 1877 and 1878? What caused it that year?

A—It was the water being taken out in other channels. In 1879 there was a good deal of water there; considerable water.

Q—Did it run all of the year in 1879?

A—In 1878; in 1878 the high water was. I mean to correct that. The high water was in 1878. I won't be positive about that, but I think the water came down in
509 the fore part of 1879. I think it was either January or February.

Q—What effect did it have upon the feed down there when the water ceased running in 1876?

A—It dried it up. We had cattle there at that time.

Q—Did it make any difference with you in taking care of those cattle, feeding them there, and if so, what?

A—It caused us to put in pumps, and pump water for the cattle, and to move them from one place to another, and to take them off entirely, away from the swamp.

Q—What year was that you put these pumps in first?

510 A—Put them in first in 1876.

Q—Wasn't there water?

A—1876, I think.

Mr. Garber. Q—Put the pumps in first in 1876?

A—Yes, sir.

Mr. Houghton. Q—Wasn't there water enough running down there to water your cattle?

A—No, sir.

Q—How was it in 1877? Did you have to pump in 1877?

A—Pumped in 1877.

Q—I understand you to say in 1876 you had to re-
511 move the cattle from there?

A—Yes, sir.

Q—How was it in 1877?

A—We had to move the cattle in 1877.

Q—For want of water?

A—For want of water and feed, both.

Q—How was it in 1878? Did you pump in 1878?

A—Yes, sir.

Q—What portion of the year?

A—We pumped until, I think, along in March.

Q—Did you pump until the latter part of 1876?

512 A—I would not be positive. I didn't attend to the pumps myself, and I didn't charge my memory with it. I would not be positive how late we pumped; I was not with the pumps at that time.

Q—Did the plaintiffs in this case in 1876 put up those pumps?

A—Who?

Q—The plaintiffs in this case—Miller, Lux, and Crocker?

A—Yes, sir.

Q—How many?

A—Put up a part of them; we put up a part of them,
513 and the firm of Cox & Clark put up a part of them.

Q—For your own cattle, I mean, or were you running your cattle together?

A—We were running them together. We put up, I think, ten pumps.

Q—How many had you put up in 1877?

A—We had the same number.

Q—And in 1878?

A—Not so many.

Q—Have you put up any since—run any since?

A—No, sir.

Q—What was the cause of your being compelled to
514 use pumps in 1876, '77, and '78?

A—No water.

Q—From what cause?

A—I suppose the water was taken. Well, for the reason that the water was taken out of the river. It did not come down to us, at any rate.

Q—How many cattle did you have to take away from there 1876 and '77?

A—We took away probably 5,000 head.

Q—Were you compelled to do it to save them?

A—Those that remained there died, the most of
515 them. They starved to death, and bogged down, the most of them; when the water commenced receding the cattle would then go into the pond holes and bog down.

Q—Mr. Crocker have you ever been through and along Buena Vista Slough when there was no water running in the channels at all?

A—Yes, sir.

Q—What was the condition of the channel of Buena Vista Slough from where it leaves Buena Vista Lake?

A—Well, I should have to describe it by sections.

Q—Describe it by sections.

A—Buena Vista Slough, from where it leaves Buena

516 Vista Lake north, to within half a mile of where New River runs into Buena Vista Slough, or where it did when I was last there, is a very deep slough, the same as it was when I first saw it; a very deep slough, but not so much water in it. When you get within about half a mile of the mouth of New River, where it enters the slough, it is different there for a distance of two or three miles from what it was when I first knew it. It is filled up with sediment and sand; grown up with willows. When we first saw it there was no timber on it. When you get still north of that point, the slough becomes more as it was in former years, wide and deep.

517 Q—How far does that continue?

A—It continues (referring to map 2), I should think from the general lay of the country, not from any actual survey—I should think there was a deep slough there for about eight or nine miles below where New River enters Buena Vista Slough, then it branches. That is the point where it reaches Weed Island and branches.

Q—What is the condition of the slough below that?

A—It is not so deep. It is a well-defined channel in the centre of Weed Island, except in one place; that is at the extreme south end of Weed Island; there the banks are low; cut out considerably on each side.

518 Q—How far does that extend?

A—It is a very short distance. I presume it may be twenty, thirty, or fifty yards; I could not say.

Q—What caused that to be in that condition, if you know?

A—When I first found that country in there, the first time I went in there, there was a large drift of timber, logs, and rubbish of all kinds, and it had blocked the slough up. The current striking against that drift had forced the water out on each side of the slough, and forced the water off into the channels on both sides of the swamp, and a portion of the water ran down

519 through the centre slough. Considerable water went through, but it was blocked up from where the drift pile was lodged in there for some distance down; it formed a kind of turf, or sod and tules, and it was very boggy, so that it was impossible to cross it. That was north of the timber.

Q—What was the condition of the sloughs as you saw them, with no water in them north from Weed Island?

A—The sloughs on both sides you have reference to, on either side?

520 Q—Take the main Buena Vista Slough first. What was the condition of that?

A—When there is no water in it, it is in places a prominent slough; prominent steep banks on both sides; at other places sloping banks; in other places it extends out over wide ground, with a depression running through, and the ground rising on each side.

Q—Is that a marked channel that you can follow through there?

A—Yes, sir.

Q—What is the condition of this slough there, the western slough, from the point where it leaves your
521 land?

A—It is a prominent slough; I have crossed it.

Q—From the point where the slough leaves your land—where McCray's testimony ceased—what do you call this building?

A—The Tule House.

Q—This is the slough that runs by the Tule House, from the Tule House into Tulare Lake?

A—A well defined slough.

Q—It is the easterly slough. Is it deep?

A—It is when it is full of water.

Q—Are the banks well defined?

522 A—In some places. In some places, in portions of the slough, the water will extend out over the banks. I could not tell the number of times I have crossed New River at Tracy's Crossing since I came here.

Q—Did you ever, at any time prior to 1876, cross that river at that point without finding water there?

A—Once. I think that was in 1870 or 1871; I could not be positive about it.

Q—Did it remain in that condition any length of time?

A—As near as I recollect, I came up to see about the water, and found the water was all off. It remained off,
523 I think, about a week, perhaps not more than 4 or 5 days; I would not be positive.

Q—Then, with the single exception of that week, say in 1871, you never crossed New River at Tracy's Crossing without finding water running there; that is, prior to 1876?

A—No, sir.

Q—Now, I will call your attention to this New River, where it empties into Buena Vista Slough. (Map No. 4 referred to.) How many forks does the river form before it empties into Buena Vista Slough?

524 A—It had three forks when I saw it last there. It had two when I first knew it. Nearly all of the water was in one.

Q—In which one was the water?

A—It was in what is now called the centre channel.

Q—What was it then? You say it is now the centre channel; what was it then?

A—It was then about the only channel.

Q—Was it the north or the south channel?

A—It was the north channel.

Q—Where does the north channel empty into Buena Vista Slough. That is, the channel which is now the
525 centre channel, and which was formerly the north channel?

A—It empties in a little north of where the bridge was, and about, I should judge, a quarter of a mile, perhaps half a mile, north of where the south channel empties into it; but I am not positive about that.

Q—Now, when you first saw water—the main body of the water in this north channel, after the water reached Buena Vista Slough—which way would it run?

A—When the lake was at a low stage the north channel ran into Buena Vista Lake.

Q—The north channel ran towards Tulare Lake?

526 A—The south channel.

Q—I am speaking of the north channel?

A—It ran north.

Q—Was that always so?

A—Always, so far as I know.

Q—Where would the waters that were in the south channel run?

A—It would run into Buena Vista Lake, until the lake raised sufficiently for the waters to flow north, and then it went and turned north, I think.

Mr. Garber—How is that. State that over; I could not get that?

527 A—The south channel, when it first commenced running, in the heavy freshet, it would run into Buena Vista Lake, south; and after the lake raised up sufficiently high the water would then turn and run north into Buena Vista Slough.

Mr. Houghton—I understand you say that all the water that ran into the north fork would run right down Buena Vista Slough without going into the lake at all?

A—Yes, sir; always ran that way—ran north.

Mr. McAllister—He said there were three forks.

A—The other fork is still north of that; and that was

528 running into Buena Vista Slough. A little fork between the main fork and the Dixon Ranch.

Mr. HOUGHTON—He says a fork between that and the Dixon Ranch, which would run into Buena Vista Slough. Then I understand you, in a few words, that the two northern branches would run north after reaching the slough?

A—Yes, sir.

Q—And the water would run into the lakes until the lakes were full, and then the whole body of water run north?

A—I can't tell you where that runs at the present
529 time. Since the water has gone down, this last water, I have not been there. The last time I saw the water running there was last season.

Q—Was that the dry season?

A—Yes, sir.

Q—And it was so when you first knew it, in 1868, and up to last season?

A—Since the last water went down the river I have not been there.

Cross-Examination of

530 J. C. CROCKER.

Mr. GARBER. Q—You first became familiar with Buena Vista Slough and in the habit of crossing through and about and across it in what years?

A—I think it was about in 1871 or 1870; 1871, it may have been 1870, but I think it was 1871. I am not positive that I was very familiar with it in 1870. There was too much water there to be well acquainted with it. I did not go through it. I was there in 1870.

Q—I don't mean whether you went through it, but whether you were there and had opportunities of
531 knowing about it during that year, 1870?

A—Oh, I was there; yes, sir.

Q—Also in 1869?

A—Yes, sir.

Q—1868?

A—Yes, sir.

Q—1867?

A—Yes, sir.

Q—1866?

A—Yes, sir.

Q—1865?

A—Yes, sir.

532 Q—1864?

A—No, sir.

Q—Well, then, it was—

A—Not in 1865. Hold on! you have got me off my line. In 1868, I was not there in 1864 nor 1865. In 1869 I first became familiar with the slough there. In 1868 I was there and crossed the slough. I did not often cross it in 1868; once only; in March I crossed it at the river, at Baker's Dam. That was probably two miles south, I should judge, from where the present dam is. Baker's Dam had then been broken; there was a portion of a dam there, and the water was run-
533 ning around it. That was in 1868. I was not familiar with the slough in 1867, and did not know anything about it then. In 1868 I was there only once, I think, in March, and crossed about Baker's Dam. I went on to the slough north of it at that time. I went down to the point marked out on the map some six miles from Tulare Lake. It was not that far at that time. I don't think at that time, it didn't look to be more than a mile to the edge of the lake. I don't think we camped any; not at all until we got to that point. We made the trip in one day, without camping. We had loose horses, and were in a hurry.

534 Q—Was all that swamp land on the line of this slough as it is claimed to exist on that map there, overflowed in March 1868?

A—I didn't go inside of it. As far as we could see from the outside, it was. The water looked to extend clear across the swamp land. That is, well, from two to five miles, I should judge. We didn't cross it anywhere.

Q—Where you stopped, how wide was the sheet of water?

A—Well, it is a slough. I suppose it is 150 feet
535 wide. I did not measure the depth. I saw a man drowned there afterwards, with his horse, at the same place. Tulare Lake was full of water at that time. The water of the lake did not back up to the point where we were. There was a current there. We were north of Goose Lake. I should judge it was five or six miles. I did not come back and cross the river when it was flowing into Goose Lake; at the time that I crossed when the river was flowing into Goose Lake, was on the first occasion that I crossed, and came from Visalia in 1868. The same year we are speaking of, I came from Visalia this way, and crossed the river from

536 north to south. It was on the same trip, but before I had reached that point, I found the current of the river at that time running into Goose Lake; a large stream. I should think it was 200 feet wide; and deep enough to sink a wagon length wise with the pole sticking up; more than ten feet deep. I should judge where we crossed it was twenty feet deep. The main depth was on the south bank of the river. On the opposite side it was shallow and you could wade there. To the horses it would come up hip deep. I judge it would swim a horse from where first we struck the water, 40 or 50 feet wide. It was quite a rapid current. I
537 don't know where that did fork at that time. I did not know at that time. I know now the old traces of the river. A part of the river was flowing down that channel at that time. The other part was flowing down where New River now is. We crossed that at the same time, near Tracy's crossing—about four miles, I should judge from the slough, down the present course of New River. That was a narrow and deep stream. I suppose it was, as near as I can recollect, 40 feet wide, and perhaps 50; I could not say; and deep enough to swim. We swam it. I could not say how deep. We swam it and floated our wagon across.
538 I should judge it was ten feet deep, and a swift current.

Q—And that was flowing at that time into Buena Vista Lake?

A—No, sir. It was flowing into Buena Vista Slough.

Q—Was any of it flowing into the lake?

A—No, sir. The lake was full. It was up higher than it has been, I believe, since that time. The water was running out of Buena Vista Lake and into Buena Vista Slough at that time, through where the levee now is.

539 Q—Did you notice what kind of a stream was flowing out of the lake into the slough at that time?

A—I did. It was a stream, as far as I know, where we crossed it, it was narrower than where it was either north or south of it, because we crossed on a part of the old Baker dam, that projected out into the water, and there was a portion of it remained. I suppose it was 60 feet wide.

Q—At that time all of the land along Buena Vista Slough to the north of Buena Vista Lake, from that to Tulare Lake was all covered; that is swamp land; all covered with water?

540 A—It looked to be, from the—

Q—You could not give me any idea as to how deep the water stood on it?

A—No, sir.

Q—Ten or 15 feet deep on an average?

A—No, sir.

Q—How deep do you think?

A—Since I became acquainted with the country, I don't think it was so deep. I could not tell you what the average would be.

Q—The land is pretty level there?

A—It is uneven land. It is not altogether level;
541 raised Islands.

Q—Were there places which would be 20 feet deep at that time?

A—It would not be likely to stand 20 feet deep where there was a fall of 2 feet to the mile.

Q—It might at such a stage of the water as there was then; might it not?

A—I don't think it would.

Q—You don't think it could have been so; and don't think that it did ever stand 20 feet deep on the swamp land?

A—I don't think it did, unless in some deep slough.

542 Q—Do you think it ever stood there 10 feet deep in any portion of that swamp land?

A—I do in the slough.

Q—Outside of the slough?

A—It might, in some low depressions; I don't think it stood 20 feet deep there. That was the last time I saw that country or streams that year; I next saw it the next year; I think it was in March, 1879; I saw it first near the present canal camp, Wible's; at that time I was not on the slough; we went down, and we had some cattle running there, and I looked after them that year; but that did not take me through the swamp;
543 it took me around, near the swamp.

Q—So you are familiar with the whole swamp from Tulare Lake to Buena Vista Lake, during that whole year, 1869?

A—I was traveling on it, off and on.

Q—Pretty much living there, were you not?

A—No, sir; I was not living there, I was living at Portersville; probably I was there once every month. I did not travel all over it; sometimes we would go to one place and sometimes to another. The water through the slough from Buena Vista Lake to Tulare

544 Lake, in the year 1879, was pretty high, although I do not think it was as high as in March, 1868; I think it was receding; I know it was; it has receded a good deal.

Q—Was not about as much land covered in 1869 as in March, 1868.

A—No, sir; it had receded so much that we could travel round inside of it, a good deal of it, and in 1870, too.

Q—Wasn't it flooded during the whole of the year 1869?

A—It was wet; yes, sir.

545 Q—The water stood over it the whole of that year?

A—No, sir; I don't think the water was over the whole of it; I think there were dry places; I could not tell what time exactly, but I think along in the fall of 1869. I did not go through the swamp; did not travel over it; I was only on the edge of it; I did not cross it at all in 1869.

Q—Then there was no time that you crossed it in 1869?

A—Well, if I had known the swamp then as I do now, I presume I could have crossed it, but as it was, I did not; In 1870 it was still lower than it was in
546 1869.

Q—And still lower in 1870—what would cause that?

A—There was not as much water flowing in as there had been, I presume; I presume that was on account of the snow; I don't know of any other reason.

Q—Nothing, except there was not so much snow or rain that year?

A—Probably not; that is my opinion of it. I crossed it in 1870, frequently; we found portions of it under water and portions of it out of water.

Q—The most of it under water?

A—The fore part of the season there was a greater
547 portion of it under water; it was not all, because all of it never comes under water.

Q—As much as in the year 1868?

A—I don't think there was as much under water.

Q—Well, in 1871 how was it?

A—In 1871 it was—there was a slough with lots of water; it continued to come down with the flood of water; I suppose on account of the immense floods, that passed off—I mean the flood of 1868; I surmise that the flood of 1871 was still felt; it was felt around the lakes for a great many years. I don't know that it

548 was from the effect of the floods that caused the fall of the water; it is only my impression. There was lots of water there in 1871. I think there was less water running in the river; I attribute that, perhaps, to less snow in the mountains. I don't think it was all covered over at any time in 1871; there was considerable water running in New River in March, 1871.

Q—As much as you saw there in March, 1868?

A—In New River I think there was; in March, 1868, when I crossed, there was but a small amount running there; in 1868 there was but one stream running into Buena Vista Slough, until you got to Goose Lake.

549 New River did not grow dry during the year 1871.

Q—Was the slough full of water all that year?

A—There was a good deal of water through the slough. There was a continuous stream of water from Buena Vista to Tulare Lake for the whole of 1871, as far as I went there was. I was in the swamp a good deal. The water was flowing all of the way through.

Q—At the lowest place in 1871, how much water was running down through that slough?

A—In most places it would swim a horse.

Q—In the very lowest place?

A—Yes sir, in 1871.

550 Q—Was it all confined to the slough at any time in 1871?

A—I think not sir; portions of it over the slough. I know there was.

Q—At any time in 1871 did it more than fill the slough; spread out over the land; to what extent at the driest portion of the year?

A—Well, it would be a hard matter to say positively in any manner. There were places where it would flow back a quarter of a mile or half of a mile. In other places it would be confined to its channel. There were

551 places where it would be confined to the channel, as marked on the map, as near as I can understand the map. It was about the same in 1872 as in 1871; and in 1873 about the same; still water there, about the same as in 1872 in all respects. There was not as much water in 1874. I attribute that to less rain, and I suppose less snow in the mountains. No other reasons that I know of. In 1875 it was still rather low. I should judge that it was about the same in 1875 as in 1874, after the spring water came through. As near as I can recollect it was about the same. I should judge from the appearance of the water there was about

552 the same amount of snow and rain in the mountains in 1874 that there was in 1875. In 1876 it was pretty dry. A portion of the time in 1876 it was overflowed. I would not be positive as to the time, but I think it was in January and February. There was water at the upper end of the swamp in March and April, 1876; the south end and running down. I think it did run down to the north end early in the spring. I think it went through, but I wont be positive whether it did or not. I was not at the lake that year. I was not there at all after that season of the year, until we commenced gathering cattle. We went down to gather cattle in about
553 July or August. I was not there before that season.

Q—In 1877 how was it?

A—It was dried up.

Q—What do you attribute that to?

A—Well, to the scarcity of water.

Q—Well, what did you attribute that to?

A—Well, it was from taking out water from the river, and perhaps from the scarcity of rain and snow in the mountains. That would have some effect on it. There was much less that year than in any other year.

Q—There was not hardly any there?

A—No, sir; very little. It ran down the river into
554 the head of the swamp.

Q—In 1877 what time of the year did the water commence to fall?

A—In the lower end of the swamp towards the lake. I only know from the men who I had to work, told me when they came back. They told me that the water was falling. I don't remember now what time it was they told me. It was along during the summer sometime. I don't think I could give the month; but I think it was in May or June, perhaps.

Q—How did you say it was in 1878?

555 A—It was dry.

Q—About as in 1877?

A—Yes, sir.

Q—Eh?

A—Yes, sir. No, sir, in 1878 it was not.

Q—In 1878 that was all right, was it?

A—In 1878—let me see—In 1878, I think, if I am not mistaken, it was the high water came down.

Q—It was all right in the year 1878, wasn't it?

A—Well, if I am not mistaken in my calculation, 1878 was the year the water came down.

Q—Well, it was as good as ever it was then?

556 A—It was for a spell.

Q—It was all the year?

A—That year we had plenty of water. There was water in 1879.

Q—Plenty?

A—No, sir, in 1879; we were pumping in 1879.

Q—Ah?

A—I made a mistake in my calculation. We were pumping in 1879.

Q—Then you did not have any water in 1879?

A—No, sir.

Q—Not even in the early part of the year?

557 A—No, sir.

Q—To what did you attribute that?

A—I attribute that to the water being taken out of the river; and to the scarcity of water in the mountains.

Q—Was that a year when there was very little rain or snow in the mountains?

A—There did not appear to be as much water as there had been during the previous years; though I don't know what the cause of it was.

Q—In 1877, when the swamp was dry, how was Buena Vista Lake and Kern Lake?

A—It got back very low.

558 Q—Wasn't it full all the year?

A—It was full, but not near as full as it had been in previous years. No one pumped water in Buena Vista Slough in 1871, according to my recollection. I think I am pretty positive about that.

The Witness. I would like to correct a statement I made, at least have time to reflect on it. I am not positive, but I think we did pump in 1871. I think we did.

Tuesday, April 19, 1881.

559 J. C. Crocker,

Recalled for further cross-examination, testified:

(To Mr. Garber)—I was familiar with those sloughs during 1880 and 1881. I was last down there four weeks ago, or a little less. In the Spring of 1880 there was water down there. I think it was probably in March or April. We had had no water before that; none at all in the lower part of the swamp; that is (from the head of the swamp down), from the foot of Weed Island north to Tulare Lake. There was no water until March, 1880, and it might have been April; and from January to March, 1880, there has been no water

560 from Buena Vista Lake down to Weed Island. It came down in the Winter months of 1880. I think it was in December or January when the first water came down; December of 1879 or January of 1880. That water went to Weed Island. I don't think it went any further than Weed Island. There was no water below that point, I think, until March or April, 1880.

Q—After that, how was it? all of the way down to Tulare Lake, covered with water?

A—So far as I went there was plenty of water in the slough. In some places there was water outside of the slough.

561 Q—Was there more outside of the slough than inside of it?

A—No, sir; I think not at any time that year.

Q—Was there any time in the year 1880 when the whole swamp land was covered with water in Buena Vista Slough?

A—No, sir; I think not.

Q—When was the last time that the whole body of swamp land was covered with water?

A—I have not seen it covered with water since about 1873 or 1874, to be entirely covered.

Q—What did you mean by covered then?

562 A—Well, high flood or freshet of water.

Q—Do you mean that at any time since 1873 and 1874 the water has stayed all over the entire body of swamp land?

A—At any time since that?

Q—Yes, sir.

A—I don't think it has been over the whole portion of it since.

Q—What portion of it has been dry every year since 1873 or '74?

A—It has been all dry since that time. It has been

563 dry in——

Q—[Int'g.] You don't understand my question. I say what portion of the swamp and overflowed land has been dry the whole year since 1873 and 1874?

A—Well, the whole swamp land has been dry at times.

Q—But I say the whole year round. What portion of it, if any, has been dry the whole year round, through any year since 1873 and '74?

A—I think in 1877.

Q—Now I ask you what portion of that swamp land

564 has been dry the whole year through, ever since 1873 and '74?

A—Well, there has been quite a proportion of it. I could not tell what proportion.

Q—As near as you can tell?

A—It would be a hard matter to tell.

Q—Can you give me a general description of what portion of land has been dry the whole year around, ever since 1873 and '74?

A—Sometimes it has been all dry.

Q—That is not what I ask you.

A—I understand. I could not tell you what propor-
565 tion. The portion that would have water on it would be the southern portion, down towards Buena Vista Lake. I suppose I have seen that when there was, probably, according to my recollection, there might have been a fourth of it under water, of the swamp land, I mean. I mean along up Weed Island, where the water first goes into the swamp. That is from Wible's Camp down to Weed Island. That has not been covered every year; but some years during that time the water went down the river, and stood at the head of the swamp, and then dried up.

Q—There has never been any year, has there, or has
566 there not, that any part of that swamp land, outside of the slough had water on it?

A—Yes, sir.

Q—What year was that?

A—No, sir, not to my recollection. There has been water in the head of the swamp; I mean from Wible's Camp down to Weed Island. I think that portion has had water in it every year. I would not be positive whether it has had it every year or not. I think it has had a little water every year. There is no other portion from Buena Vista Lake to Tulare Lake that has had water every year to my knowledge.

567 Q—Then, with the exception of that portion from Wible's Camp down to Weed Island, all of the balance of the swamp land from Buena Vista Lake to Tulare Lake, has, for certain years, been dry the whole year round?

A—Yes, sir. As near as I can recollect, in '76 and 1877, and a part of 1878. I don't recollect distinctly that there were any others.

Q—You know whether there was, don't you?

A—I have been over it and through it all of the time;

568 but I have not kept any date of it; I have been extremely familiar with the country ever since 1871, and I tell you as near as I can; I say that there was no water in that portion of the swamp in 1876 and 1877, and a part of 1878.

Q—All other years, so far as your knowledge goes, it had water on it for some time in the year?

A—I believe so, except one.

Q—What was that?

A—That was in the drought of 1871, I think.

Q—Well, was there no water in the slough at all in 1871?

569 A—There was; I could not tell exactly when it commenced to run; it began along in the winter or spring; I think probably in March; I cannot tell exactly how long it continued to run; I know it ran down the swamp, as near as I can recollect, 15 miles, and that stopped running; I think it ran a couple of months; after that there was no water in the slough in 1871, only what was pumped and in the place on the slough right below Wible's camp; standing water; water in pools; that was on the south end of Weed Island; there was a slough there that had deep holes in it; a part of the slough. I could not tell how deep the water was; it was very deep; 15
570 or 20 feet, probably; I did not measure the water, and I suppose it was 15 or 20 feet from the bottom of the slough to the top of the bank; that is the slough from the surface; the slough was full at sometimes when the water was going down; and was full, I suppose, in the spring; at that time I suppose the water was 18 or 20 feet deep there.

Q—At the very dryest season of that year, how deep was the water at that point?

A—Only in small holes or ponds. I could not tell how deep the deepest holes were. It lay in ponds; and the
571 sloughs used to come in. I don't know how deep the holes were. There were different holes there that had water in them.

Q—Take that hole that was some twenty feet deep; how low did the water get at the lowest, according to your recollection?

A—It got so low that the fish all died in it. I could not tell how low, because I did not measure the water. It might have been two feet, or might have been five or six. I could not tell. That was in the year 1871.

Q—What portion of the swamp land lying between

572 Buena Vista and Tulare Lakes was covered with water at any time during the year 1871?

A—The water ran down from the head of the swamp, from the south end of it. I call the head of the swamp the south end, or Wible's Camp, where the levee is. I call that the south end. When I speak of the south end of the swamp, I mean Wible's Camp. There is very little swamp land between Wible's Camp and Buena Vista Lake. It is ten or twelve miles from Buena Vista Lake down to Wible's Camp. It is not, to my knowledge, a large body of swamp land between the two points. I think there is a small portion.

573 Q—How wide do you think was the water at the widest, between Wible's Camp and Buena Vista Lake, along in there?

A—I have seen water there at times—where it came down to New River here through these streams; I have seen it spread out over the country.

Q—How wide have you seen it there standing?

A—I never saw it standing, I saw it running. I never saw any water standing there, unless it was in holes when the water went down.

Q—How wide have you seen the land that was wet there, and covered with water, at one time?

574 A—I have seen it wet through there the whole distance from Buena Vista Slough very near up to Bakersfield. I think that was in 1868. I never saw it after that.

Q—How much of that swamp and overflowed land, from Wible's down to Tulare Lake, was covered with water in 1871?

A—The water ran down the slough, about as near as I can recollect, from travelling over the country often and being acquainted with it; it ran down about fifteen miles. I think down the slough; but mostly confined to the slough. In places it was deep; in other places
575 it was shallow.

Q—Was it up to the tops of the bank of the slough?

A—In some places it was.

Q—How deep are the banks of Buena Vista Slough from Wible's crossing down to Weed Island?

A—Well, very deep from Wible's Camp down to Weed Island. I think it will average in the neighborhood of 15 feet.

Q—Is that a continuous slough or channel from Wible's Camp down to Weed Island?

576 A—No, sir, not quite to Weed Island.

Q—How far from Wible's Camp does a continuous and well defined slough extend north?

A—I think about 3 miles or 4—3 miles.

Q—What is the depth and height of the sides of the slough during those 3 miles?

A—Well, that is the deepest portion I speak of. I should judge from Wible's Camp down there three miles —I should judge the deepest of it in the deep holes, taking it along there, in my judgment, would average about 15 feet. It may not be so deep. That would be my opinion. I could not tell what the highest place
577 would be. I never measured it. I can only recollect from the surface down to the water. I have never seen it entirely dry there in my life. It is not dry there now.

Q—From Wible's Camp down the slough?

A—No, sir.

Q—Where does the water come from?

A—I suppose it went down the river, some of it. In the dry seasons it soaks in. At the present moment I think it goes down the river. I have not been there for a month.

Q—How does it get into the slough below Wible's?

578 A—It goes through the headgate. It did. I have not been there for months. I cannot tell you how it is now. I don't know whether that headgate is shut or not. That headgate is on the levee before you get about 300 or 400 or 200 yards, perhaps, this side of the headquarters house.

(The witness's attention is called to map No. 2.)

The headgate is some 20 or 30 or perhaps 50 feet from where the levee crosses the old slough. It is not a greater distance than that.

Q—Is there a headgate within 50 feet of the old
579 slough where it crosses the levee?

A—Yes, sir. I mean a gate to allow the water to flow through the levee.

Q—Then there is a headgate within 50 feet of where the levee crosses the old slough, so constructed that the water coming down the old slough can be continued along north in the slough without going into the canal at all?

A—Yes, sir; I don't know whether all of the water has been flowing down the canal within the last month or not; I have not been down there within the last

580 month; I have never seen the slough just below Wible's entirely dry—north, I mean; I have seen it dried down into little holes of water; lagoons; I was down there the last of November.

Q—Was'nt there any time when there was not any water in the slough below the levee and below the canal?

A—No.

Q—Was there no time, to your knowledge, when the canal took all the water in the slough and left none to go down the old slough below it?

A—No, sir.

Q—There never has been a time?

581 A—No, sir; the canal has taken some of it; and at times, I judge, has taken the most of it; I have seen the time when the slough below the levee was nearly dry; I have seen it so that the water was cut off entirely; only left in holes.

Q—Then you have seen it when there was no water running through the slough there where it crosses the canal?

A—Yes, sir; none in the canal, either, at that time. The slough would be then dry below the canal, except in holes.

Q—How deep were the banks—the deepest there?

582 That is what we started to get at—along there from that point down to Weed Island?

A—I believe there are places there where it would be from the bottom to the surface, 20 feet.

Q—For that distance of three miles where you say it is well defined, what is the shallowest bank in the whole slough in that three miles?

A—I should think it was 30 or 40 feet.

Q—I speak of the height of the banks, not the widths.

A—No; I think it runs out as you go towards it; the nearer you get to Weed Island the shallower the banks get.

583 Q—You told me there was a well-defined channel there from Wible's for three miles?

A—Yes, sir; and the banks in the deepest are 15 or 20 feet deep.

Q—At the shallowest, how deep is the channel?

A—I should judge probably 8 or 10 feet; and prominent for that distance. Then, probably as you go north, it runs out.

Q—To nothing?

A—No, sir; not entirely to nothing.

584 Q—What is the depth of it at the end of that three miles; the depth in the channel?

A—It is more of a depression than of a channel where I spoke yesterday of the drift-wood blocking it up. There is no drift-wood there now.

Q—There is no channel to the end of that 3 miles, going north?

A—Yes, there is a channel; there is a channel that is cut out on both sides of the slough.

Q—Cut out; has it any banks?

A—Yes, sir.

Q—How wide apart?

585 A—I could not tell how wide they are.

Q—How far apart are the two banks of that channel, if it has any banks?

A—It is cut out in places.

Q—I am speaking of the bottom of that three miles in the Old Slough that runs down you say three miles, and is a well-defined slough with high banks. At the end of that where it ceases to be well-defined, how wide is the distance between the banks, if it has banks, below that?

A—I should suppose it to be—the slough is wider after you get right to this low place where the water 586 breaks out; the slough is wider than it is this way.

Q—How wide is it after you get three miles down and leave the well-defined banks?

A—That is the place I am speaking about.

Q—How wide does it get at the widest?

A—It branches into three sloughs; one runs on each side.

Q—Are there three well-defined sloughs there?

A—In portions of the way there are; in some portions.

Q—Immediately after you leave the point where the well-defined slough ceases, do you come to the three 587 sloughs that are stated on this map No. 2? Show me where it ceases to be a well-defined slough on there.

A—I should think it would be somewhere here (pointing on map). It would be somewhere on Sec. 32, I think. Let me see, I said about three miles from the canal camp. It would be somewhat about here (pointing).

Q—Wherever it is, it goes down until it ceases to have well-defined banks to it?

A—Yes, sir.

588 Q—Now, at that point just below that point, how wide is it between the two banks, if there are any banks?

A—There it is more of a depression on both sides where the water has cut it.

Q—It is more of a depression in the ground than a channel cut through the ground? Is that so?

A—Yes, sir.

Q—Well, it has no banks to it, then?

A—In places it has.

Q—In places it has not?

A—In places it has sloping banks.

589 Q—It has no banks; just a depression in the ground?

A—No perpendicular banks.

Q—No banks of any kind, has it?

A—It has in places.

Q—There are places where there is no bank at all?

A—Yes, sir.

Q—There are places where there is a sloping bank on each side, and places where there is a very well defined bank cut right down by the action of the water?

A—Yes, sir.

Q—10 or 20 feet high?

A—Yes, sir.

590 Q—Then there are other places where there is no bank?

A—No perpendicular banks.

Q—No bank of any kind?

A—Yes, sir.

Q—How wide apart are those banks?

A—In these places pretty wide.

Q—How wide?

A—50 or 75 feet.

Q—In some places 200?

A—Probably. Yes, sir.

Q—Some places a quarter of a mile?

591 A—Not at that point.

Q—Are there some places along the whole course of the slough where you find the banks a half a mile or a quarter of a mile apart?

A—I could not say. In high water sometimes.

Q—From one bank of the channel to the other, at the widest, is there a place where there it is half a mile?

A—There is a place where the water goes down and flows out over the banks of the slough; and it flows back that depth, I think, at high stages of water; and at low stages of water it does not.

592 Q—Isn't there a well defined channel all of the way from Buena Vista Lake to Tulare Lake?

A—A channel that carries water, there is.

Q—Is there any one continuous, distinct, defined channel from Buena Vista Lake to Tulare Lake through there?

A—I think there is. I am positive of it.

Q—Have you followed it up all the way?

A—I have been over it.

Q—Every foot of it?

A—I would not say over every foot of it. I have been over every quarter section of it.

593 Q—You have never seen that channel that water was not running in it?

A—Yes, sir; I have seen it when water was not running in it many times.

Q—How often?

A—I could not tell you how often.

Q—When was the first time you did that; no water running in it?

A—In 1871. The next time, I think, was in 1876, and the next in 1877, and the next time, I think, was a portion of 1878. The water was not running clear through in 1878. But in 1878 there was a time—in a
594 portion of 1878 I saw the slough when there was no water in it. I think it was from January to—but I could not tell you exactly. It was probably a month or two.

Q—Do you mean to say that for a month or two at that time in 1878, there was no water running in any part of that slough?

A—It was then running in the upper part. It commenced running in the upper part. I could not tell you now exactly what time in 1878. I think it commenced running in the head of the slough. I could not be positive as to that before 1878. In the latter part of 1877 I could not say certainly, as I have no memorandum of it.
595 Then it went on down from there to the Lake that same year.

Q—Now, Mr. Crocker, from Weed Island down to Tulare Lake, or north, how is the slough that you speak of, with regard to its being well-defined or otherwise?

A—It is a watercourse or channel in places varying in depth; a channel in places with sloping banks, and in other places rather flat. When filled with water it will spread out; at other places it goes in confined banks.

Q—Is that one continuous slough or channel all of the way from Weed Island down to Tulare Lake?

596 A—Yes, sir.

Q—Are there many of them?

A—There are more than one.

Q—How many distinct channels are there from Wible's down to Tulare Lake?

A—There are two that I consider prominent water channels that go through.

Q—Are there two continuous water channels running all of the way from Wible's down to Tulare Lake through that swamp?

A—No, sir. There is one running down to Weed Island—only one channel until you get to the head of
597 Weed Island.

Q—From Wible's to the head of Weed Island there is only one channel or water-course through the whole swamp, the whole width of it?

A—At a low stage of water.

Q—At a high stage of water, how is it?

A—It will spread out and go through other sloughs.

Q—How many channels are there besides this one you speak of from Wible's down to Weed Island?

A—I don't know of any regular channels. There is places where there is depressions—no regular slough.

Q—Why isn't it as much a regular channel as the
598 channel from the place where the permanent banks cease down to Weed Island?

A—Well, I mean water goes down through the slough, it being the larger slough.

Q—Are there not other channels, from Wible's to the head of Weed Island, just as distinct when there is any water there; that gave as much the appearance of a water-course, when dry, as the one of which you have spoken?

A—I think not. I think they differ—not having a current.

Q—I am speaking of the appearance they present
599 when the water is all off and they are absolutely dry?

A—On the east side of that slough, from Wible's Camp down between that and the mainland, there are depressions in the ground, like sloughs, cut out.

Q—Wherein does not that, when the water is all gone, present just the same characteristics of a water-course as the one you call the main slough?

A—There where the water breaks out, the water that runs down there generally comes in and stands between the levee and what we term the head of Weed

600 Island, on the east. It stands in that country. I have never seen it with a current there, as there is through the head of Weed Island. In going from Wible's down to Weed Island, when the water is taken off there, and the country is perfectly dry, I only found one channel from Wible's down to Weed Island. That is, to where it widens out. That, I guess, is about three miles.

Q—There it has a perfect channel, with well-defined banks, and rather narrow?

A—Yes, sir.

Q—From that point down to Weed Island, how many channels are there?

601 A—From this point where it breaks out?

Q—Yes.

A—There are three.

Q—Where are they on the map?

A—I cannot tell where they are on the map—on this or any other. I only know from knowing the country. I presume that this western channel on this map refers to one of them, and that the middle one represents one; and the water breaks here and goes over on this line [showing].

Q—From that down to Weed Island, how many channels are there?

602 A—From this point where it breaks out?

Q—Yes.

A—There are three.

Q—Where are they on the map?

A—I could not tell you exactly on this map, or any other. I only know from knowing the country.

Q—Does this represent one of them on the west?

A—I presume that represents one.

Q—And that the middle one?

A—Yes, sir.

Q—Then there is another over here?

A—The water breaks here, and goes over this line
603 (showing).

Q—From that point, which is just three miles below Wible's, down to Weed Island, you find three channels in the swamp land?

A—Yes, sir.

Q—Wherein do they differ from each other, if at all? Mark you, I am speaking of when they are dry.

A—I don't know that they differ materially—the three. Two of them do. The centre channel has got more prominent banks than those on the two sides.

604 Q—The centre one has not any banks at all, has it?

A—Yes, sir.

Q—How wide are those banks apart again?

A—That is the bank below this break?

Q—Yes, sir, I am talking about after you got below the break, it has no banks?

A—Yes, sir; it has banks in places, and deep.

Q—How wide are these banks, how wide apart?

A—I presume they are very nearly as wide as the slough. They are not half a mile apart, nor a quarter.

Q—Wherein does that channel below the point where it is well defined, as you say, differ from this western
605 channel?

A—It differs because in portions of the way this has cut through and formed a regular bank. I speak of the western one.

Q—Then the western channel is well defined and looks more like a water-course than the middle channel?

A—No, sir. It carries more water than the middle one, because the middle one was shut up with the drift wood, which turned the water out of it at one time. I think the water will run into this western channel before it will run in the middle one.

Q—Don't you know about that?

606 A—I think I have seen water running there. I would not be positive. I am pretty sure I have seen water running in this channel before it got into that, but I would not be positive as to that.

Q—You cannot be certain as to that?

A—No, sir. I first saw water running in this west channel in 1854. I suppose it was.

Q—In 1854 you saw a stream of water running in this western channel from a point about three miles below Wible's down to Tulare Lake?

A—I didn't go in there to see where it came from.

Q—I am speaking of that point down to Tulare
607 Lake. You saw the water running in this west channel?

A—I saw it from where I struck the swamp, clear down. I did not go into the centre channel. I did not tell whether there was water in it or not. The first time that I saw water running in the centre channel, was, I think, in 1870 or '71. I could not tell positively.

Q—How much water was running in it, in that channel then?

608 A—Well, it was swimming. It was probably in March or April when I went in there.

Q—How deep was the water at that point where the banks got wide and sloping, and not well defined? I am talking of, below the point where the banks were well defined.

A—Where it broke out?

Q—Yes, sir; below the point where you call the banks well defined?

A—We didn't go across that water in those times.

Q—You saw the water running in below the point where it is well defined?

609 A—Yes, sir.

Q—What sort of a stream of water was running in there in 1871, at the time you speak of?

A—There was a big stream of water running in there. I could not tell how wide or deep. I did not go in there.

Q—How wide have you ever seen the channel running in there?

A—I have seen the water from one margin of Weed Island to the outside.

Q—At this time in 1871, what sort of a stream was running in this channel?

610 A—That swam our horses. We got into it. We crossed on horseback. I think we swam this channel in different places on that slough to get on to Weed Island. I presume we swam—but I won't be positive —our horses, 50 or 60 feet.

Q—Do you mean that there is one distinct channel in this west channel, and then you came to dry land, and then found another channel?

A—Yes, sir.

Q—And then you got on dry land, and then found still another channel?

611 A—Yes, sir; there were 3 distinct streams running down there in 1871.

Q—How wide was each of them?

A—Well, running down through the centre it did not vary much in width.

Q—How wide was it?

A—As near as I can recollect, about 50 or 60 feet wide.

Q—Filled with water to the top of the bank?

A—Plenty of water at that time, when the water was coming down; it had as much water as it could hold at

612 that time, and dry land was in between them; no great amount.

Q—Was'nt the whole country covered with water at that time?

A—No, sir; I think that was in April or May, 1871; it might have been in 1870; but I think it was in 1871.

Q—Now, along there in the Spring of 1871, you saw these three streams running with that amount of water all full?

A—Yes, sir.

Q—How long did that water continue to run in that year, in that way?

613 A—It ran in that way until along in the latter part of the season. It stayed all during the season.

Q—To what time?

A—I suppose it was running—I could not say positively.

Q—What do you mean by a whole season?

A—The whole year.

Q—The whole year?

A—Yes, sir.

Q—Are you positive about that?

A—I think so.

Q—Did you see that in 1871? that state of affairs?

614 A—Yes, sir.

Q—Take your time to think and see if you are sure about that?

A—I think I am. We had to swim our horses across.

Q—Was it the same thing in 1872?

A—Yes, sir.

Q—And 1873? the same appearance there in 1873?

A—Yes, sir; as near as I can recollect.

Q—Well, in these years that we have been talking of, how were the sloughs from Weed Island down to Tulare Lake? How many distinct channels were there running there, when you saw three streams running up here?

615 A—There is a portion of the way that there were three running, portions of the season.

Q—They looked like three distinct rivers or streams?

A—Yes, sir.

Q—With dry land in between them?

A—When the water was not too high. At times, when the water was too high, the whole thing was all under water, except the islands. Weed Island never was covered with water, or Goat Island. I never saw this covered with water.

616 Q—Now, you say that there is a head-gate about 20 or 30 feet north of the place where the slough crosses the canal?

A—Where the levee crosses; yes, sir. I should judge about that distance.

Q—You say there has been no time to your knowledge when the water has not been running from that head-gate into the slough. It never was entirely cut off as far as you know?

A—I have seen the gate shut up.

Q—Then you have seen it when all of the water was run into the canal, and none into the old slough, down
617 below the levee?

A—I have never seen it in that way, except when there was but very little water running through the head-gate.

Q—Who built that canal?

A—I suppose the Kern Island Canal Co.

Q—Who are they?

A—I could not tell you.

Q—Did you have anything to do with building it?

A—I suppose I had something to do with the corporation. I had to pay some of it.

Q—Did you have anything to do with the building of
618 that canal?

Question objected to by plaintiffs on the grounds, first, that it is immaterial and irrelevant; and second, that it is not legitimate cross-examination. Objection overruled. Plaintiffs except.

The Witness—Personally I had not. I mean that I had no hand in constructing that canal *personally*.

Q—Did you in any way, not personally?

A—So far as the corporation is concerned, I did. I think I purchased supplies for the building of it. I
619 presume I paid a part of the expense of building it. I was present when it was being built, and saw it.

Q—It was built with your consent and desire wasn't it?

A—No, sir, it was not done with my consent.

Q—Did you object to it?

A—I was opposed to it.

Q—But you agreed to it, didn't you?

A—They made me agree to it; cinched me.

Q—You paid; who made you do it?

620 A—I could not tell you. I did not want to stand a lawsuit, and I just came forward, like a man, and says I, "You have got me, and I will go with you."

Q—Who has *got* you?

A—The Kern Island Water Co. I supposed it was an incorporated company.

Q—Why did you suppose so?

A—Judging from their proceedings.

Q—What proceedings?

A—Cinching me. I could not say whether the canal was built before the incorporation or not. I know when the canal was first commenced, I think in 1876, along in
621 the Fall months, but I could not tell what months positively. I believe Mr. Colton had charge of it first. I don't know who employed him. The first I had to do with it was going down with Mr. Livermore and others. I don't know who they were. I think that was in the Fall of 1876. We went down and looked over the country there, and they decided where they would commence work; the parties interested.

Q—Who were they?

A—Well, it was the Kern Island Water Co. Mr. Livermore was there and Mr. Souther was there. I could not tell who else. I think there were others. I
622 went with the party. I went there because I expected to get cinched, and I wanted to see how they were going to do it.

Q—Why did you expect to get cinched?

A—Because I was informed it was an incorporated Company. That was generally spoken of here. I was told that by parties who were members of it.

Q—Didn't you go there simply as a landlord—as owner of this swamp land?

A—No, sir; not simply on that account. I was not summoned by anyone. No notice was given me. I met the parties here in town, Mr. Livermore and others.
623 They said they were going down on the Kern Island Water Co., to establish a line for the purpose of building a canal. I understood they had power, so far as our lands were concerned, but I could not tell what power. I was so informed. I could not tell who told me that now. I understood it that way; that our lands were to be assessed in company with all of the other lands assessed by the Company, the Kern Island Water Co. I don't know what kind of an incorporation that was.

Q—Did it occur to you to ask how a set of men could
624 form a corporation and assess your lands?

A—I did not know anything about that.

Q—In your own mind didn't it occur to you "how shall these people assess my lands?"

A—I cannot tell you. As far as that is concerned, I suppose it was assessed for that reason. The lands were assessed to the different owners in the Association.

Q—If some Corporations should say that they were going to assess your lands, wouldn't you know something about it? Wouldn't you say "you cannot assess my lands?"

625 A—It depends upon whether my lands are included in the corporation. I don't know how my lands could have been included in the corporation without my consent. I cannot tell. I don't know that it could not be done.

Q—Don't you know a set of men cannot go and form a corporation, and thereby acquire power over your land?

A—No, sir; I don't know it.

Q—You think that because these people saw fit to form a corporation, that it had some power to assess your lands?

626 A—I suppose so; I did not ask.

Q—You did not ask for advice from anybody on the subject?

A—I don't think I did.

Q—You were not a stockholder in that corporation?

A—I considered myself so.

Q—How did you think you could be a stockholder in that company?

A—I think so. To tell you the truth about that, I did not post myself in regard to it, but my parnters in the concern, Miller and Lux, said that this land belonged to this corporation—the Kern Island Water Co.
627 —this portion of land that I speak of.

Q—The land that is in suit here?

A—I believe it is the same land.

Q—Miller & Lux told you that the land that you have sued for here and described in the complaint, belonged to the corporation?

A—That it was included in the corporation.

Q—That meant it belonged to the corporation?

A—I don't know that it meant that way; no, sir.

628 Q—What did it mean, if it did not mean that it belonged to the corporation?

A—It meant it was included, and liable for assessments for building and constructing the works that we then contemplated, or afterwards—that is, the canal company. I suppose the canal was contemplated at that time.

Q—Did you ask them what they were going to make that canal for?

A—Yes, sir.

Q—What was the reason?

A—Going to make it to take the water of the swamp and put it back in again, to regulate the water.

629 Q—Who told you that—Miller and Lux?

A—I think Miller and Lux talked to me about it.

Q—Miller and Lux were informed of this thing, were they?

A—I don't know that they were.

Q—Didn't they tell you they wanted this channel built?

A—They told me that the lands were to be assessed to pay for the construction of that canal, and that my interest would be.

Q—Did they tell you they wanted it done?

630 A—No, sir; they didn't tell me they wanted it done; they told me that the assessment would have to be paid. I believe there was an assessment levied; but I have the assessments, I presume, for building this canal. That is, I paid into the corporation my proportion; I paid it at different times. I cannot tell how much, they having the books. I presume I am a stockholder in that company. I never saw the papers. I don't remember whether I have stock in it or not. That business I have left entirely to Miller and Lux. They told me that my interest in the land was assessed. They did not tell me how much stock I had in the corporation. I don't think I

631 know how many acres I had.

Q—Didn't they tell you how much stock you had in the corporation?

A—I think they did; I think they told me I had two shares to the acre, or something like that.

Q—Now, Mr. Crocker, see if I cannot refresh your recollection upon the subject. Don't you mean that the swamp land district made that canal, and not the corporation?

A—No, sir; I didn't understand it in that way. I

632 heard it said that there was a swamp land district. I knew nothing about it.

Q—Didn't you vote as a member of that swamp land district, claiming land in it?

A—No, sir; not that I know of.

Q—Wasn't you present at the meetings of the swamp land district?

A—I was present at the meetings of the corporation.

Q—Wasn't you present at the meetings of the swamp land district?

A—I did not understand it in that way. I have heard it called No. 121.

633 Q—Were you not present at the meetings of that district?

A—I was present at the meetings of what I considered the Kern Valley Water Company.

Q—You never was present at the meetings of but one corporation, or institution. or whatever it was, were you?

A—Not that I know of.

Q—Then might it not be that the meetings that you were present at were the meetings of the swamp land district, and not the corporation?

A—I think not. I didn't understand it in that way.

634 Q—Do you recollect signing any papers in connection with this corporation?

A—I may have signed some papers. I would not say precisely. I cannot recollect.

Q—You don't recollect that the swamp land district commenced this work?

A—No, sir. I didn't understand that I was proceeding with any swamp land district. I have heard it said that there was a district; that it was Number 121. I don't know who the trustees of that district were.

Q—Have you never attended a meeting of that district?

635 A—I believe I have attended a meeting of the district which embraces the land that was said to have belonged to that district. I did not understand the meeting to be of that nature. I supposed it to be a meeting of the stockholders of the Kern Valley Water Company.

Q—Well, the effect of that canal would be what, on the land below the point where it crosses the slough, if the head-gate is kept shut?

A—If the head-gate were kept shut, what would be the effect on the land below?

Q—Yes.

636 A—To turn the water off of it, you mean?

Q—It would take all the water?

A—A great portion of it.

Q—What is the capacity of that canal?

A—I believe that canal is 120 feet on the bottom. It varies in depth. I could not tell the grade. That is something I know very little about. I should judge there was very little difference between the grade of the canal and that of the slough.

Q—What depth of water will that canal carry at its full capacity?

637 A—It varies in depth. I think it is deepest up in this portion of it.

Q—What will it carry at the lowest point? What depth is it capable of carrying, if filled to its full capacity?

A—I suppose it would carry as much water below as it would where the deep cut is. I believe it is 120 feet wide on the bottom, and I should think the canal was 140 feet wide on top. I could not tell you its depth. In some places it is nearly on top of the ground. There are places in that canal where, if the canal was run to its full capacity, it would run ten feet deep. Then as you go
638 further down it would be less. I suppose at the lowest place it would be three or four feet deep; perhaps not so deep. It spreads out when it gets below there, and don't confine itself to the channel altogether. It grows wider as you go down. I think it would carry the same amount of water all of the way through that it would carry where it was ten feet deep.

Q—Would that canal, if you should shut the gate, carry all of the water out of the slough which it was capable of bringing down to the point where it leaves the slough?

639 A—It would depend upon the amount of the water in the river.

Q—Are there stages of that river when the slough carries more water than that canal can carry?

A—Yes, sir; more than all the canals on this island.

Q—When that slough is full, without overflowing its banks, would it carry more water than could be carried in that canal?

A—I think not. I could not tell you what the growth of tules along that slough, from Wible's camp to Tulare Lake, now is. I have not been there for about a month.

Then the growth was not very high when I was there.
640 It was not all covered with tules. There was a portion of it where the tules were growing. I did not go all over it, to see what portions. I could not tell you what portions, because I did not go over the swamp land to see. I was on the swamp land only at one point. Where I did see it, there were not tules all over it. I was in the swamp by Eberly's hog camp, or the hog camp called Dover's Camp. Tules were there in some places; they were commencing to grow, but not got up—were just starting. The tules had been burned down there, and the most of the country has been burned off. The tules are burned off every year. They burned them off
641 to gather their hogs. That has been the custom ever since I have been working in the country. They are burned off to clear the country and to open the sloughs in places, so that we could manage our stock.

Q—How is it in the channel that you speak of, in the water—any tules in it?

A—There are, in places.

Q—Right in the channel which is marked down there as the main slough?

A—Yes, sir, I presume there is. When I saw it there was, when I was there last.

642 Q—Any difference between that you call the bed of the channel and the balance of the swamp, as to the growth of tules in it?

A—Yes, sir; there was a difference.

Q—What is the difference?

A—The tules where there is a current of water running down do not grow so thick as where there is no current. Where the current is running tules do not grow until the water comes on.

Q—Is there any part of the swamp now where the tules do not grow, which you call channel?

A—I think there is.

643 Q—Is it a well defined place, running down north?

A—Yes, sir; in places.

Q—And in places there is no such absence of tules.

A—Yes, sir.

There are many places in the channel that no tules grow, and many places where they do grow.

Q—Take it over where Kern River comes into the slough, from there down to this canal is there any growth of tules right in the slough?

A—No, sir; I don't know of any; no growth of tules

644 in there at all. There are tules along outside of the slough, in places; in some places, I presume, a quarter of a mile wide. There is no growth of tules in the channel there.

Q—From Wible's down to the head of this Weed Island, is there any growth of tules in what is marked as the channel on the map.

A—No, sir; none at all.

Q—In the swamp land that is marked as swamp land on the map, outside of the channel, is it all covered with tules?

A—In places where the water channel is; in places
645 there are tules, and in other places not. By the channel I mean where the main current of water goes.

Q—I am speaking of the slough, from Wible's down to the head of Weed Island?

A—In the main slough, in the centre of the slough.

Q—In the centre of the slough you told me there was no growth of tules?

A—Not in the centre.

Q—Is there any in this slough to the west?

A—There is none until you get to where this timber was lodged. From there down there is tules growing in
646 that place, right in the channel of the slough.

Q—That is the place where you speak of where the banks are not so prominent and well defined, but they slope out?

A—Yes, sir; somewhat. That has been filled up. I presume the main slough was filled up by this freshet lodging timber in it. It is what we call boggy—a quagmire; you cannot go across it.

Q—Is it the fact that everywhere through the slough' calling the slough the whole body of swamp land—when I say slough, I do not mean the channel, I mean the whole body of swamp land—is it true that everywhere through-
647 out that slough all the way up and down, north and south, where the channel, as you have said, is not prominent and well defined; where the banks slope out, that the tules grow in the channel?

A—In many places they do. It is not the rule.

Q—Can you tell me in what proportion it does, and in what proportion it does not grow in that part of the channel where the banks are not well defined and prominent?

A—I could not tell you exactly by the map. I dont know as I can tell you generally.

Q—What makes the difference? Why is it that in
648 some places in the channel tules grow, and in other places they do not?

A—I have my reason for it. I don't know whether it is a correct one or not.

Q—What is your reason?

A—My reason is, that in some portions of the swamp there is a greater fall than others, and where the fall is greater the current is more rapid, and cuts the tules and the vegetation out of the water.

Q—How far is it from where the timber lodged down to this Weed Island? What portion of that distance do the tules grow in the channel—on a straight line, with-
649 out following the bends on the slough?

A—I should judge you would find tules in different places; not all of the way, but in different places, for a distance, perhaps, of three miles. I would not be positive. Where the tules grow, in most places there is a deep quagmire; you cannot get across it. A horse would bog right in all through.

Q—Are the tules growing in this western channel, say, from the head of Weed Island down? Do you find tules growing in that channel?

A—You do, in some places.

650 Q—What portion of it? Wherever it widens out?

A—No, sir; not in all places.

Q—Generally where it widens out?

A—No, sir; only in certain places.

Q—In some places you find tules, and in some you do not?

A—In some places the channel widens out, and you will find in places, where it has not got prominent banks, that there is no tules in it. I think the levee was built across the slough near Cole's in 1877. I remember when it was built. I saw them building it. I passed by them at the time when they were working on it. I don't know that
651 I had anything to do with it. I could not tell. I presume I assisted in building it. I supposed when it was built that the Kern Island Association built it. I knew of it at the time—the time they commenced work on it; happened to cross there about that time. Mr. Wible had the building of it. I think he was the general superintendent of the Kern Valley Water Company. He was not in the employment of the swamp land district, that I know of. I think that was built in 1877, perhaps in the winter of 1876. It might have been. It might

652 have been extended through two years. I think it was in 1876 or 1877. It might have been December, 1876. I don't remember.

Q—What effect did the building of that levee have upon the water flowing down through Buena Vista Slough?

A—It would have the effect to check the water from going into Buena Vista Lake.

Q—So long as it was intact and complete, it would prevent any water from going into Buena Vista Lake, wouldn't it?

A—That would depend upon the stage of water in the

653 river.

Q—At all stages of the river?

A—No, sir.

Q—If that dam had not broken, had been kept up as first built, wouldn't it have kept all of the water out of the lake?

A—It would have had to run it clear up above Bakersfield.

Q—Why?

A—Because, when it gets more water than it will carry, the river overflows the banks.

Q—Since that time there has never been such a stage,

654 has there?

A—Yes, sir; one year.

Q—If that dam was complete and unbroken, has there ever been a time when it would not have kept all of the water out of the lake?

A—Yes, sir; I think so, in 1868.

Q—The dam was not thought of then?

A—No; but I say the river at that time carried enough water.

Q—I am asking you about since the dam was built.

A—I beg your pardon. I have seen the water run across there.

655 Q—You have never seen such a stage of water since the dam was built that that dam would not have kept it out?

A—Yes, sir; in 1880, I think.

Q—So much water came down the river in 1880, that even if that dam had been completed as it originally was, and remained unbroken, it would not have kept the water out of Buena Vista Lake?

A—I do not know as to that; I could not say for certain. It might have run right over the dam. It would

656 have been apt to run over it if there had been obstruction enough to run it that way.

Q—Why wouldn't it all have gone down Buena Vista Slough?

A—For the reason that there is an obstruction north.

Q—Where?

A—At the mouth of New River.

Q—What made that obstruction?

A—New River

Q—Do you mean by carrying sand down there?

A—Yes, sir.

Q—What kind of obstruction is that?

657 A—It is sediment sand.

Q—Has it been carried down by New River?

A—Yes, sir; to the mouth of New River.

Q—And it has so filled up the slough there as to force the water into the lake; is that it?

A—That is the way I understand it, a portion of the water. This dam, I think, is on Sect. 5, T. 31, R. 25.

Q—You said yesterday, if I remember correctly—or, rather, you attributed the insufficiency of the water in 1876—to what did you attribute it?

A—I believe I attributed it to the water being taken 658 out and conveyed into the channels, and perhaps, I said it was a scarcity of snow in the mountains. I was not in the mountains. I did not, at that time, specify what canals were taking it out. I don't think there were any names called.

Q—What canals did you mean?

A—I meant all the canals that take water out of the river above that point. I don't know that I could enumerate them all; I could many of them.

Q—Well, enumerate them; all that you can?

A—The Kern Island, the South Fork, the Stine. I don't know as I could mention all of them; there are 659 several branches of the Stine, I understand. I have not been at the head of it. There are a great many others that I know, that I don't know the names of.

Q—Haven't you been up the river and seen every canal that comes out of the river?

A—No, sir; not since these canals have been constructed from here along the margin of the river. The last time I was up the river was about a week ago.

Q—Haven't you seen every canal that comes out of the river?

A—I did not follow the banks of the river. I think I

660 have been on every canal that has been taking out of the river; but not at the head of it. I don't know where each canal takes water from the river.

Q—You had been to the Calloway?

A—I have been there twice.

Q—When?

A—It was some three or four days ago.

Q—When before?

A—I was there I don't know—I could not tell you exactly when. It was a month ago, perhaps.

Q—Was that the first time you were ever there?

A—I saw the Calloway last fall.

661 Q—At the head of it?

A—No, sir.

Q—Was that the first time you had seen it?

A—Yes, sir.

Q—When was the first time you ever heard of it?

A—I have heard of it several years.

Q—Do you recollect when you first heard of it?

A—No, sir; I do not.

Q—Did you ever see a notice of it?

A—I never saw a notice of it that I recollect of. I never saw any notice posted up on it that I recollect of.

662 Q—When did you first hear of the Calloway being built, or contemplated?

A—I could not tell you when it was. It must have been three or four or five years ago. I could not tell when it was.

Q—Did you hear of it about the time it was commenced?

A—I presume I did. I knew Mr. Calloway by sight. I had no acquaintance with him. I don't know when he commenced the canal.

Q—Did you know him at that time ?

A—I heard people say he had commenced a canal over there. I never talked with him about it.

663 Q—Didn't you make any objections, and tell him he must not take that water out ?

A—I don't know that I ever had anything to say about it; in one way or the other. I don't know that he was building a canal, of my own knowledge

Q—You don't recollect that you did tell Mr. Calloway that he must not build the Calloway Canal ?

A—I don't know that I ever spoke to him about that. I have no recollection about that. I never spoke to Mr. Calloway, that I recollect of. I merely knew him as I met him on the street.

664 Q—Did you ever talk to Miller & Lux about the Calloway Canal?

A—I think I have spoken with them upon that subject.

Q—When?

A—Three or four years ago.

Q—When it was first talked of?

A—Yes, sir. I don't know that it was when it was first talked of.

Q—The first time you heard it talked of?

A—To the best of my recollection; yes, sir.

Q—You spoke with them about the fact that the canal was being started there?

665 A—Yes, sir.

Q—How soon after that did you see that canal?

A—I saw it last fall for the first time.

Q—Did you not go there before?

A—No, sir.

Q—You knew where it was, though, didn't you?

A—I knew by hearsay.

Q—About where was it?

A—I never saw it until last fall.

Q—Did you go to the records, to see the record notice of it?

666 A—No, sir.

Q—Did you hear about the dimensions that it had?

A—I presume I have heard it. Not to my knowledge. I could not tell the dimensions of it now.

Q—Did you talk to Miller & Lux about that?

A—I presume I did at the time, about the fact of taking out a large canal. I cannot tell you the dimensions of it; I never knew it; I don't know it to-day.

Q—You had heard what the canal was taking out water for, hadn't you?

A—I presume; it was the general talk.

Q—You knew what it was; you knew for what pur-
667 pose it was?

A—No, sir; I did not.

Q—You knew that, according to the law and custom here, a notice would be recorded, didn't you, to every canal that is taken out?

A—No, sir.

Q—Didn't you know that the law required the party who appropriated water to post a notice and record it?

A—No, sir.

Q—You never knew that before?

A—No, sir.

668 Q—Didn't you know it was customary here?

A—I believe it is with most companies.

Q—You knew that, didn't you?

A—No, sir; I didn't know that was the law.

Q—Didn't you know it was the custom for those who take water out to record a notice?

A—In some cases it is; in others it is not recorded.

Q—You knew it was the rule to do it?

A—No, sir; I never examined the record. I cannot say that I knew it was customary for persons who claimed water, and all who took up water, to record notices of their claim.

669 Q—You never heard that?

A.—No, sir; I have not examined the record.

Q—You have never heard that there was such a book of records?

A—I have heard that there was.

Q—You knew there was a book of records kept, in which notices were recorded?

A.—I looked over one book of records myself; the old book of records.

Q—Where did you look at it?

A—In this town.

Q—When?

670 A—A good many years ago.

Q—How long?

A—Eight or nine years ago? There were not many claims recorded; very few.

Q—What was the name of the hog camp you spoke of down there?

A—Dover's camp, I believe it was called, or Eberly's. Some called it Eberly's. That hog camp is on Sec. 1, T. 29, R. 22; that is where Dover's camp is. That is what I call the hog camp. The slough was to the east of that camp, I think perhaps half a mile; perhaps a quarter of a mile east of that. That is the
671 nearest slough to the hog camp. Then there are two other channels further east through the swamp there. The channel opposite that hog camp is a channel with banks to it a part of the way; a part of the way it has none.

Q—Is that part of the channel which you describe as having prominent and well-defined banks there; is it a channel with less well-defined banks, and sloping up, being a sort of depression in the country?

A—That is about the character of it. There is a portion of it that I would consider a defined channel right out in the swamp, opposite the hog camp.

672 Q—In the channel opposite this hog camp is a portion of the slough which has well defined and prominent banks?

A—Not so prominent as it is in other parts of the swamp, but more prominent than in some places; not the worst nor the best, would be my opinion. That is the way it compares with the balance.

Q—About how deep is the channel there?

A—When it is full of water it gets very deep. It will get up very full before it overflows so as to flow over the country. Generally it will run over a horse's back. I refer now to the western channel. The chan-
673 nel is better defined as you go below; better as you get further down. It continues so as far down as I know the channel, towards the lake. The eastern branch of that channel continues clear to the lake from opposite the hog camp. It is a well-defined channel, the course of the current of water. At high stages of water it is necessary to swim it.

Q—You call that part of it—of the eastern channel which runs opposite the hog ranch, and from there to Tulare Lake—you call that portion of it a well-defined channel?

A—Portions of it are well defined.

674 Q—All of it?

A—No, sir, not entirely; a great portion of the way it is a well-defined channel. I could not tell you what proportion.

Q—What portion of it from the hog camp to the lake, of the eastern branch of the channel, is what you would call a well defined and prominent channel?

A—I suppose there would be a portion of it—I should judge that two-thirds of it, perhaps more I could not tell you exactly.

Q—The middle channel; how was that from the hog
675 camp down?

A—The middle channel, I understand, don't run clear to the lake. I suppose, as near as I can recollect, it runs on down; I should judge runs down probably ten miles below the hog camp. There it branches off or runs off and connects with another slough. As I understand it, and am acquainted with the swamp, regardless of the map as I have seen it; the current of the water, it turns right to the northeast and runs into the slough on that side of the swamp into the eastern branch.

Q—What sort of a channel is that from the hog ranch down to where it joins the eastern branch?

676 A—Portions of it have a well defined channel, and other portions of it low and it breaks out.

Q—What portion of it is well defined?

A—It has no perpendicular banks there only in places. It has a defined water channel, but not with perpendicular banks.

Q—You will have to go over that again. You divide this into two classes; one part has a well defined and prominent bank; and the other part is defined more like a depression in the ground.

A—Yes, sir.

Q—The portion of the middle branch, which extends
677 from the hog camp to its junction with the eastern channel, corresponds to that part of the channel which you designate as the worst defined, not the best defined; where it is more like a depression than a channel? Is that so?

A—I should say no.

Q—Then it corresponds to the portion you speak of as well defined?

A—I should consider it so, but I would like to explain it. There are places where the slough is deep and very well defined, what I would consider a well
678 defined slough; and as it runs quartering across the swamp I believe that it loses its full velocity as it passes across the swamp to the east or northeast; it breaks off into little lakes; when these lakes fill up it then flows over the bank and forms into another small lake, and from that it continues on until it reaches the main slough—the eastern branch.

Q—Then I understand you that this portion of the middle branch, which extends from the hog camp to the eastern channel is, part of it, well defined, and part of it not?

A—Part of it has little lakes.

679 Q—What portion of it corresponds to that which you designate as well defined, with prominent banks; and what portion of it corresponds to the other that is not so well defined.

A—I could not give you any definite idea.

Q—Of course you can only approximate it.

A—What I do consider a well defined channel would be, I believe, three-quarters of it. The western channel is the one nearest to the hog ranch.

Q—How is that western channel from the hog ranch down to the lake?

A—In a great many places—large portions of the

680 country—it is a quite well defined slough; the other part is a depression, and has sloping banks. I speak of that portion of the western channel which extends from the hog camp clear to the lake.

Q—What proportion of it is well defined, and what proportion of it is not well defined?

A—The greater portion of it is well defined; nearly all of it.

Q—How deep will the water be in those parts of the slough where the banks are lowest, before the water begins to escape over the banks, or, in other words, how high are the banks of the slough at their
681 lowest? When I say the slough I mean the channel. I want to correct that, I am speaking of the channel, not of the whole slough, as I call it. You understand me?

A—To which channel do you refer?

Q—The entire portion of the channel which extends from Buena Vista Lake clear into Tulare Lake, how high are the banks at their lowest?

A—At the lowest, in some places there would be no banks at all, but this depression.

Q—Where there are banks?

A—There are in many places high banks.

682 Q—At the lowest, how deep would they be?

A—I suppose some of these banks along there would be a foot deep; I think they could not be much lower.

Q—Now, are the banks of the slough or channel generally of the same height as the land adjoining, or higher or lower than the land in the swamp or slough, outside of the channel?

A—It depends upon the portion of the swamp; it is not all alike; in some places the banks are a great deal higher, and in some places lower; in many places the banks are higher than the country round, but it is not generally so.

683 Q—Generally the banks are lower than the country outside?

A—Yes, the banks are higher than the country outside, I mean.

Mr. McAllister. Q—You say the country is higher than the banks outside?

A—The surface of the country outside is higher than the banks.

Mr. Garber. Q—How long are the places, or any of them, where the banks are only, say, one foot in height—the longest that you know?

684 A—I could not tell you how far it would be. Places where there is a small slough, quite a narrow slough, and on each side of it are banks rising, on each side off at a distance, a greater or less distance. If you confined them to the cut that is made in the ground, I do not consider that the natural channel; it is a little cut that is made in the bottom of the water course. I would not consider it in that way, that that would be a channel. There are places through there where the channel has been cut, where there is a channel, and with banks well defined.

Q—Which are only about one foot high? Now how
685 long at the longest is there one continuous stretch of channel which has its banks as low as that?

A—I don't think there is but a very short distance; there may be 500 feet. I could not say whether there is a thousand or not. There might be a thousand feet. I have seen stretches pernaps 100 feet long and may be less. I might have seen them a thousand feet long, but I think not. I think the most prominent one I have seen was at the south of Weed Island, where the water breaks out; and I think there are other places, but I could not specify or describe them. When the water rises to the height of a foot it would begin to
686 flow over these banks.

Q—A good deal of water runs out over those places, does it not, even in moderate stages of water?

A—It would flow back until it would strike the higher ground, and then it would confine itself.

Q—You say that a good deal of water will run out over these places you are speaking of, even in a moderate stage of water?

A—When the swamp or sloughs are full enough to run out.

Q—Whenever it gets that high?

A—Yes, sir.

687 Q—When the water in the slough is a foot deep, what proportion of the water carried by the slough will escape over the banks?

A—I could not tell you what proportion of it. There would be a large proportion of it would escape until it had filled up those low places.

Q—Where the bank is low?

A—The low places; the channel where the water goes through. It would fill up and then take the channel.

Q—Can you give me any idea what proportion of

688 the water that is carried by the slough would go over that way?

Mr. McAllister. When it is one foot deep, I understand your question?

The Witness. I could not tell you.

Mr. Garber. But a good deal of it?

A—Yes, sir.

Q—As more water comes down the slough, increasing the depth of the slough, more will escape will it not?

A—I suppose it would.

Q—The more that comes down the more will escape?

689 A—The more water there is in the swamp, the more will escape in the channel.

Q—Do you think that more water there runs over the land outside of the banks than runs between the banks of the slough?

A—In high water I think it does; runs over.

Q—How much more? 100 times more at times?

A—I think the time has been I have seen the swamp in the extreme flood of 1868, when there was more water outside of the slough than in it. I could not tell you whether it was 100 times more or not. The whole country was under water, I presume it was 10 times as

690 much. It was a solid sheet of water when I saw it.

Q—In high water all the swamp land—you know what I mean by swamp land—all of the land there marked as swamp land in that map is covered with water 10 feet deep, isn't it?

A—No, sir; nor 8; nor 6 feet deep.

Q—How deep?

A—Some of it it did not cover at all. In extreme high water, by swimming the sloughs, you can travel around on horseback over the greater portion of the country.

Q—At the very highest water?

691 A—The very highest I have seen. In 1868 I didn't know this, as I said yesterday.

Q—Ever since 1868?

A—Yes, sir, you can travel around on horseback.

Q—It would be 5 feet deep probably?

A—No, sir.

Q—Four?

A—No, sir.

Q—Three?

A—Perhaps, in many places it may be 4. In other places 2, or 1.

692 Q—In some places 10?

A—In the sloughs.

Q—Outside of the sloughs?

A—I presume in those little lakes that are connected with the sloughs it would be 10 feet deep. The water would not be 10 feet deep outside the sloughs.

Q—In no place?

A—None that I ever saw, but in the sloughs or in the little lakes connected with the sloughs.

Mr. GARBER. Isn't it a fact that the bed of the Kern River from Bakersfield down to the mouth of it is higher than the surrounding country?

693 A—I could not say that it is.

Q—Isn't it a fact that the level of the banks of the channel through the Buena Vista Slough are higher than the surrounding swamp lands?

A—They are.

Q—Always and everywhere?

A—No, sir.

Q—As a rule, does not the land slope off from the banks of the channel to the outside edges of the slough?

A—Not as a rule, in that country.

694 Q—The water which stands outside of the channel on the swamp land in Buena Vista Slough, does that water reach Tulare Lake?

A—I presume it does, a portion of it.

Q—That portion of it which does reach Tulare Lake, does it ever get into the sloughs, or does it reach the lake without flowing through the channels?

A—I think, generally, that as the water flows and decreases in the channel, that it turns the water off, and it returns to the slough again; it runs back through the channels and then passes off, generally.

695 Q—Do you mean to say that all of the water that stands outside of the channel on the swamp lands, as the water recedes, turns back to the channel and through the channel into Tulare Lake?

A—I should judge that the greater portion of it does. I have noticed that when the water was falling there was a current in among the tules there.

Q—That channel is very crooked, is it not?

A—Yes, sir, in places; in other places it is not.

Q—Where it is crooked, that lessens the velocity of the flow, doesn't it?

A—Yes, sir; I suppose it would.

Q—For how long a period have you ever known the

696 water to stand above the banks of the channel, continuously?

A—I could not tell you. On portions of it I have known it to stand. I suppose it stood on the greater portion of it for a considerable length of time, probably a year or two. It might have been longer, or it might not have been so long.

Q—Have you known the water to stand on the swamp land outside of the channel at times when the Kern River was very low?

A—In places I have, in low places; while the water was running in the sloughs. I don't know that I can
697 give any particular year that it stood that way. I never charged my memory with it. I think a number of years I have seen it standing when the sloughs were running; water in places and standing outside of the sloughs, but I cannot tell any particular year that I have seen that. I did not see it in 1871. There was no water there.

Q—In 1872?

A—I think, perhaps, when the water got up in 1872 and '73 it might have been out. It was, undoubtedly.

Q—It stood outside of the channel, still at the same time the river was very low?

698 A—No, sir; when the river is very low, the water does not run through the swamp much.

Q—Do you mean to say that when the river gets low there is no water standing outside the channel on the swamp land?

A—There is in places.

Q—Well, to what extent in that slough?

A—Well, it would be when the river is very low, and there is a small amount of water going into the swamp, but it would be a small proportion.

Q—What do you call a small proportion?

A—The low depressions and the little lakes.

699 Q—Will that channel carry within its banks and through the swamp land as much water as is now running in Kern River?

A—I don't know how much is running in the river now. I saw it about a week ago. When I saw it I saw it above here on the bridge.

Q—Can that channel carry through the swamp land without overflowing its banks, as much water as you saw then running in the river?

A—It would overflow some portions of it.

Q—Would it carry a quarter of it without overflowing?

700 A—Yes, sir; I think it would, except in such low places as I have mentioned. It would overflow those places I speak of there, where the water sets back. I think probably it would overflow some at places in the swamp.

Q—Were you not a Trustee of the swamp land district?

A—I did not understand it so. I never understood that I was a Trustee of the swamp land district.

Re-direct examination of

701 J. C. Crocker.

[To Mr. Houghton.] I know where the levee is that is built across Buena Vista Slough, 2 or 3 miles from where it empties into Buena Vista Lake.

Q—Would the construction of that levee in any manner interfere with the running of the water of New River down through Buena Vista Slough to the land in suit?

A—It would. At a low stage of the lakes a portion which runs in the south channel would go into the lake.

702 Q—Would the construction of that levee in any manner interfere with the water running down Buena Vista Slough?

A—No, sir.

Q—What effect would it have upon the waters running in Buena Vista Slough?

A—It would make more water run in the slough. If the gate was closed it would make the water run north instead of letting it run south into the lake.

Q—What would be the effect of that levee upon the water running down the South Fork of New River, provided the gate was open?

703 A—If the gate was open it would go back into Buena Vista Lake from the South Fork of New River.

Q—Your attention was called to the canal that has been constructed along the border of swamp land running down through the three townships. I understood you to say that in times a portion of the water running through Buena Vista Slough has been thrown in that canal?

A—Yes, sir; after turning it in, it follows down that canal.

Q—What has become of that water after it has been turned into that canal?

704 A—At the present time it follows the canal for 4 or 5 miles below Dover's Camp, and then passes out of a canal through a break into the swamp, and back into the Buena Vista Slough. I suppose that break is down about 20 miles; I should judge so. I should think the canal was 28 miles long. I am not positive about the length of it. I have seen water running the whole length of that canal.

Q—Providing the water was running in that manner, what became of it after it had gone the whole length of the canal?

A—It passes out of the canal and into Buena Vista
705 Slough, and ran down Buena Vista Slough.

Q—Provided the water was running the whole length of the canal, where would it discharge itself into Buena Vista Slough? I think the larger map will show you.

A—[Examining map 1.] It would discharge due west of Goose Lake, and from there it would pass on from Buena Vista Slough to Tulare Lake.

Q—Then, turning the water from Buena Vista Slough into that canal, and running it the length of it, and letting it run out, would in no manner interfere with the water of Buena Vista Slough running through the
706 portion of land described in the complaint that lies close to Tulare Lake?

A—No, sir.

Q—It would all have to run through that channel eventually?

A—If the water was all turned down that canal it would make a greater supply of water.

Q—Why would it make a greater supply of water?

A—Because there would be less evaporation, and less loss of water. It would also run in a straight channel.

Q—And it would all continue on in the same Buena
707 Vista channel after it was turned in that it would if it had run down the natural channel?

A—Yes, sir. At present the water is turned out of the canal at the point down about 20 miles.

Q—How many gates are there in that canal, where the water can be dropped from the canal back into Buena Vista Slough?

A—Five or six, I should judge. I am not positive; may be more.

Q—Then, if you should turn the water into that canal, and let it out at any of these gates, or let it out at 2 or 3 gates, where would it run to?

708 A—It would run back into the slough

Q—No matter where it was turned out, it would run back into Buena Vista Slough?

A—At any point that I know of.

Q—Is there any other escape for the water by turning it out of that canal, except into Buena Vista Slough?

A—No, sir.

Q—You have said, in connection with the channels running down through the tules, that where the water runs, as I understand you, when the water is running, the tules will not grow?

709 A—Yes, sir. That is so. The stronger the current, I said, I believed the less tules grow in it.

Q—Then, if you take that land along Buena Vista Slough during high water, and go through the tules, could you select the channel where the running water was, from the fact that there would be very few tules along it?

A—I could.

Q—There would be open water?

A—Not in all places; but it would be much less tules than there would be where the water was shallow. In deep water the tules do not grow so thick.

710 Q—I understand you to say, Mr. Crocker, that where the water running down that slough runs into a pond or lake and the current is in a measure stopped, that at that point the tules will grow up?

A They grow up in the surroundings of the lake generally, not through the center of it.

Q—Then all of those lakes, or nearly all, where the sloughs run through them, will be surrounded by tules?

A—Generally speaking. As a rule they are surrounded by tules, but no tules in the center of them.

Q - In speaking of a lot of drift wood that you found at one time at the south end of Weed Island, when was
711 it that you went down there and found that drift wood?

A—I think 1871 was the first time I saw it. It was after the flood of 1868; in 1871. I think I may be mistaken as to the year. It might have been 1872. I was on Weed Island, I am positive, in 1871. But whether I went to the drift wood in 1871 I cannot say; but somewhere about that time. At any rate it was after the flood.

Q—What was the character of that drift wood you found there?

A—Well, it was logs; broken logs; some of them 40

712 or 50 feet long, perhaps longer; and some of them were two feet through. They lodged in the slough on the point of that island.

Q—And caused the slough to divide around each side?

A—I attributed it to that, as the slough was stopped and no chance for a regular current to go through. There was some water going through this timber, and still going on down this slough, which kept the slough tolerably full of water, but the current of the water was stopped.

Q—But afterward, later than that, did the driftwood
713 disappear?

A—Yes, sir.

Q—After the driftwood disappeared, what change did it make in the channel that ran through Weed Island; the center channel?

A—The channel was filled up a great deal with tules and a kind of sod grown over it.

Q—Well, did the water, after the removal of that obstruction, course through that channel?

A—Yes, sir. That timber we found there came down from the mountains, I presume. It was pine, and some kind of cedar. I have used the wood and cut it; per-
714 haps other kinds of timber; and I know there was some redwood.

Q—You have spoken of the fact that there was a dry season when you pumped there in the year 1870 or 1871. Can you fix the year? I have not the testimony before me. There was a dry season you testified to, I understood you, in answer to a question that Mr. Garber asked you, either in 1870 or 1871?

A—In 1871.

Q—How do you know that was the year 1871?

A—We had to pump, and other things in connec-
715 tion with it that I know of.

Q—Well, what other things?

A—Well, there is one circumstance that I know of. We bought the land there in 1870, and immediately after that I rigged up the pump and we went to pumping.

Q—Then it was after you bought the land and went into possession—the year after you bought the land and went into possession, that there was that short season of water?

A—Yes, sir, 1871.

Q—You speak of buying the land. For whom was

716 that purchase made? Was that purchase made the year previous to that dry season?

Mr. GARBER—One moment. The deed will be the best evidence.

The WITNESS—I think the purchase was made——

Mr. GARBER—One moment. I object. The deed is the best evidence.

Mr. HOUGHTON—The deed is in evidence. I want to fix the time the purchase was made.

Mr. GARBER—The deed will show what year it was.

Mr. HOUGHTON—It won't show, because he made several purchases.

717 Mr. MCALLISTER—There was one deed in 1872.

Mr. GARBER—And one in 1877.

Mr. HOUGHTON. Q—Mr. Crocker, you said there was some circumstance in connection with the purchase of that land that enabled you to fix the year 1871. I will ask you what purchase that was, and who from?

A—Will you allow me to look at the deed?

Mr. FLOURNOY—We object to that.

Mr. HOUGHTON—I will repeat that question without offering the deed.

The WITNESS—I have to take this entirely from
718 memory. I am not prepared to answer the question until I can refer to dates.

[Question again read by the Reporter.]

That was what I wish to refresh my memory about. I know there were several purchases.

Q—Mr. Crocker, what was the condition of the water in that slough in the first part of 1879; the first months?

A—There was very little water, if any. I think no water except in holes.

Q—Was there any water running down that slough
719 in 1879, prior to the 14th of May, the day this suit was commenced?

A—I think not. I cannot say exactly when the water ceased running down that slough in the year 1878. But it ceased in April or May or June, somewhere along there, I think; but I am not positive.

Q—Did any run down during the year 1878, after the month of July?

A—I think not; I don't think there was.

Q—How many head of cattle, if you know, were on the Buena Vista Slough lands, and along the Buena Vista Slough, on the swamp lands, during the years 1872, '73, '74 and '75?

720 A—I think we generally estimated at that time that there was in the neighborhood of 25,000 or 35,000 head of cattle, during those years, belonging to different parties.

Q—Was there feed sufficient during those years, for all these cattle along that slough?

A—Generally there was.

Q—How was the feed along the sloughs in the two dry years, 1876 and 1877?

A—The feed was very poor; very little feed.

Q—How many cattle were there along the slough during the dry years of 1876 and '77?

721 A—I should suppose at the commencement of the dry year there was as many cattle there as there was before. Afterwards at least one-half of the cattle died.

Q—From what cause?

A—Died from want of feed; and they got bogged down in holes; that was in 1876 and 1877.

Q—How many were there in the dry year 1878?

A—Much less.

Q—How many should you think?

A—Fifteen thousand; perhaps fifteen thousand. There was no great loss of cattle there in 1878. In 1879 we lost cattle. In 1879 I don't think the num-
722 ber varied much from where it was before; 15,000 head probably. It would be a hard matter to tell how many died during the year 1879. There was not much of a loss that year, I think. There were portions of the year that I was not out over the lower end near the lake.

Q—Did you have plenty of feed that year?

A—No, sir.

Q—How many cattle could you carry along that year along the slough?

A—I don't suppose we could have carried any more
723 than we did have.

Q—You say in 1872 and 1875 you carried 35,000 head of cattle there?

A—There was that many there.

Q—Did the land carry them?

A—I suppose they must have lived on the land.

Q—What was the cause of these cattle dying that did die in 1871?

A—They died principally from want of water.

Q—What is the effect upon the feed on that land, if you turn the water from it?

A—It would dry it up, I think.

724 Q—If you were to turn the water off for two years, what would be its condition?

A—I think it would dry up.

Q—What effect would it have on the land and feed?

A—It would make it unproductive.

Q—What effect would it have upon the value of the land?

A—Well, I think the land would be worthless without water.

Q—What is the quality of that land; the whole of that land along Buena Vista Lake to Tulare Lake?

A—It varies in quality. The majority of it is what
725 I consider good land; what I would call first-class land. So far as we have experimented upon it, we have raised good crops.

Q—Are the waters that run down Kern River sufficient in ordinary seasons to furnish the Calloway Canal and the other canals taken out of this river, and supply the land at Buena Vista Slough, and the land described in the complaint?

A—No, sir; I should say not.

Q—You said, in answer to a question put by Mr. Garber, that in 1869 you never crossed that slough; and gave as a reason that you did not cross it, that you
726 were not as well acquainted with the slough as you are now?

A—Yes, sir.

Q—And had you been, could you have crossed it?

A—Yes, sir, I think I could.

Q—If that land along Buena Vista Slough was covered with water, as it used to be in 1869, '72, '73, '74 and '75, could you, notwithstanding that, make a crossing of that swamp land?

A—I could cross it, I think.

Q—Are you sufficiently familiar with the country to
727 know just what you would have to meet with in crossing?

A—I think so.

Q—Would you know, in making crossings at different points, whether you were going to meet water which you would have to swim in, or which you could ford?

A—At the stage of water that existed at that time, I should know I had to swim it.

Q—Would you know in selecting a certain point, what kind of water you would have to meet or contend with?

A—Not at every point.

728 Q—Well, in selecting your points?

A—I would at the present time. If I knew at that time, as well as I do now, I would know very near what water I had to meet. At the present time I would know.

Q—Have you been acquainted with Kern River and New River; what is called New River, since its change in 1868?

A—Yes, sir. It has run, I think, in one channel since then, from the point where it leaves the bluffs above Bakersfield.

Q—You spoke in your cross-examination of having
729 crossed the branch of Kern River in 1868, immediately after the flood, that ran off into Goose Lake. Has the water of Kern River at any year since then run in that channel?

A—Not to my knowledge.

Q—You have crossed that channel every year, haven't you?

A—I have. It may have continued in 1869. I won't be certain about that. It may have run there in 1869, or a portion of 1869. It has not run there since 1869, to my knowledge.

Q—Had no water been taken out of the river by these
730 canals in the years 1876, '77 and '79, would the water have run through to Buena Vista Lake?

A—I think it would. There is no doubt of it in my mind.

Q—Have you ever been on Buena Vista Slough, at any point, in a ferry boat?

A—Yes, sir; at Tracy's Crossing; I think I put it there, but I wo'nt be positive, in 1871; the boat that I made was made of plank 17 feet long, 2 feet wide and 2 inches thick. The boat was 8 feet wide or about that. We used it for crossing the slough, for crossing our wagons on.

731 Q—What became of that boat?

A—It was taken off down the slough.

Q—Did you ever see it afterwards?

A—I did.

Q—Where did you find it?

A—I found it near the head of Weed Island.

Q—How far from where you had been using it formerly?

A—I suppose it was five miles or such a matter. I never had any other boat on the slough at that particular place; but I had a boat down where the Dover's camp is now.

732 Q—What use did you make of that boat?

A—I used it in running around through the swamp, and through the sloughs. That is at what is called the hog camp.

Q—You say you went about the sloughs in that boat; how far would you go in the sloughs in that boat?

A—Well, I have been as far as I could go down the sloughs and get back the same day; I should think 3 or 4 or 5 miles, and I have been a short distance up the slough from that point, but not far, perhaps a mile or two.

Q—I understand you to say that prior to 1878, it was
733 a continuous stream, running through Buena Vista Slough and Tulare Lake, when you knew the country?

A—Yes, sir.

Q—Did you ever at any time have any talk with Mr. Calloway about the canal he was constructing on the other side of the river?

A—No, sir; I don't recollect of speaking to the man on any subject.

Q—I understand you to say that you have known water to stand for a year or two in places outside of the canal, slough and ponds; what do you mean—at what places?

734 A—I mean the lagunas; I mean the little lakes; these depressions that might be termed pot holes in the ground; lakes. And they filled up when the water was high.

Q—In buying those lands which you and Miller & Lux own along Buena Vista Slough, and described in the amended complaint, did the fact that these lands were supplied with water enter into consideration when you made that purchase?

[Defendants object to the question as irrelevant, and not tending to prove any of the issues in this case. Ob-
735 jection overruled. Defendant excepts.]

A—It did.

Re-cross examination of

J. C. Crocker.

The course of New River has not changed to my knowledge since the change that took place in 1868. There has been no change in the channel at all to my knowledge.

Q—Do you say now, that ever since 1869, or even since 1870, what you call New River has preserved the same channel exactly?

736 A—Well, it has, down until you get close to the slough, and you might say there that it is changed.

A—It has made some change within two or three miles of the slough.

Q—What changes?

A—It has changed its volume of water in the different channels, from one to the other.

Q—Has it changed the channel; taken a new channel or a different one?

A—It had not. It had changed the south channel somewhat; which was carrying more water; and the channel I think is changed. I think it has changed
737 further to the south. I think it has been changed for the last two or three years. The last time I saw it, there was water running in the main channel—in the centre channel; but the channel has been changing, and going further to the south. I think that change has been gradual, from year to year; shifting its channel so as to go further south from year to year. I think the channel to the north has also changed. I think it has taken water from the centre channel, a portion of it, and carried it further to the north. I think it has been shifting every year, judging from my knowledge.

Q—When was it you said you had that ferry boat at
738 Tracy's Crossing?

A—I think in 1871, but I won't be positive. I think I probably had it there a year, and used it frequently. I could not say what carried it away. I could not say whether it was a flood or not. I suppose it was carried away probably in 1872. It might have been later. I cannot say when I first missed it. I paid considerable attention to it, because I needed it. But I don't remember now when I did first miss it. I think I had it though in 1871. The boat I had at the Hog Ranch I got in 1870 or 1871, I am not certain. That was a little canoe about 14 or 15 feet long made of
739 boards. I had it near where the Hog Ranch is now There was no Hog Ranch there then. My object was to go through the swamp and on the Islands to get cattle out.

Q—Wanted to use it in your business?

A—Not particularly; I wanted to use it to explore the swamp and find crossings. I think I kept it there one summer. It was either the summer of 1870 or 1871. Probably I went down with that boat during that year from the Hog Ranch three or four miles; I

740 could not say certain. I suppose I got within 25 or 30 miles of Tulare Lake; probably 25 miles. I think I was down there more than once. It was in the summer; I could not tell the exact month. It might have been May and it might have been September. That might have been any time from May to September.

Q—How deep was the water when you took that sail?

A—In places very deep.

Q—Over the slough?

A—Yes, sir.

741 Q—And overflowing outside of the slough, wasn't it?

A—In places; yes, sir.

Q—Did you tell Mr. Houghton that there was not water enough coming down Kern River to supply what these canals were taking out and supply the swamp with water?

A—There has not been, not during the years I have mentioned.

Q—The years you mentioned—1876, 1877, 1878 and 1879—there was not water enough for both of these purposes, I believe you said?

A—I think that is what I said. I think that is what
742 I mean. I think I am positive about it.

Q—How much water were those canals taking during those years?

A—I cannot tell what amount of water they were taking.

Q—Well, how can you tell, then?

A—I can tell there was very little water running in the river.

Q—If you don't know how much the canals were taking, how can you tell what effect that had on it?

A—Well, I attributed it to that, for the reason that
743 the previous years there had been plenty of water.

Q—In some previous years there had not been?

A—One year.

Q—Well, how could you attribute it to the canals, without knowing what the canals were taking?

A—Judging from the seasons.

Q—Did you go up above to see what the canals were taking?

A—I saw what the same canals were taking, crossing them frequently. In 1876 I did not see what the canals were taking, nor did I know what they were taking. I had an idea of what they were taking.

744 Q—Well, how much were they taking?

A—Well, they were taking pretty much all there was in the river.

Q—During all of those years?

A—At certain times in the year.

Q—At what time in the year?

A—When there should have been a full supply of water in the river, there was very little.

Q—In 1876, '77, '78, '79 and '80, those canals were taking about all there was in the river in those seasons?

A—Yes, sir.

Q—There was not any left to come down?

745 A—There was some, yes, sir; but very little. Some of these canals have been taking water from the river ever since I came to the country, that is, ever since I have known this settlement. I never had any conversation with Mr. Calloway about his ditch or about his project.

Q—Let me see if you are sure about that, or if you have not made a mistake, if I can refresh your memory. Don't you recollect having given testimony in a contest that grew out of that undertaking of Mr. Calloway, in relation to the character of those lands as desert lands?

A—I don't recollect it.

746 Q—Don't you recollect of having made an affidavit in regard to that matter?

A—I do.

Q—Well, wasn't that done in a proceeding where the question of Mr. Calloway's enterprise was discussed and spoken of a great deal?

A—I did not know that Calloway's ditch had anything to do with it myself. I never saw the ditch.

Q—Wasn't it in relation to that canal that that affidavit of your's was given?

A—I suppose that was the intention of the canal. I don't remember the time I made that affidavit. It may
747 have been in the Fall of 1876 I made that affidavit, but I am not positive. I don't remember the time.

Q—At that time, didn't you have a talk with Mr. Calloway?

A—I don't recollect of ever speaking to Mr. Calloway in my life.

Q—To whom did you talk about it?

A—If I am not mistaken, I may have spoken to Mr. Haggin about it—about this desert land.

Q—About that Calloway Canal?

748 A—I don't know as I had anything to say to Mr. Calloway about the canal.

Q—Didn't you talk to him at that time about the fact that it was an attempt to irrigate the desert land with the Calloway Canal?

A—I don t recollect that the Calloway Canal was ever mentioned.

Re-direct examination of

J. C. Crocker.

To Mr. Houghton—I would not say positively that
749 the Calloway has been taking water out ever since I have been in the country. I don't know to my own knowledge that it was taking water out more than a month.

Q—Do you mean to say or intimate that the Calloway was used when you first came here?

A—I never heard of it.

Q—You speak of a change that has taken place in the channel of New River, where it enters into Buena Vista Slough. I wish you would explain that change—what has taken place there since 1868?

750 A—Since I first knew that, in 1868, there was a whole body of water run through the centre channel. Nearly the whole body of the water went through that then. The south channel did not exist then, so far as I remember, and the south channel has increased, and carries a portion of the water that used to run in the centre channel and the north channel.

Q—There is still another channel still northerly of what we call the north channel?

A—I can't say as to the present time. Last year I saw it. This year I have not seen it since the water was running through it.

751 Q—Last year what was the condition of it, when it was carrying water?

A—It was carrying water, and had a good deal of water in the north channel.

Q—The old north channel?

A—Yes, sir. There was not quite near the amount of water running there that had run in former years.

Mr. Garber—Q—That was in 1880?

A—Yes, sir. I think I was there several times that year.

Q—What time did you have reference to; that at a

752 certain time there was not near as much water running down the centre channel?

A—I crossed there at different occasions during the season. I could not tell you.

Q—You have said that at a certain time—I don't know when it was—there was not so much water running down the centre channel as there used to run down? Now, what time was that?

A—Sometime during the Summer.

Q—About what time?

A—I should say about June or July, or May.

Q—About June or July. How much water was run-
753 ning down the centre channel then?

A—I could not tell you.

Q—About how much?

A—Well, it was no great amount.

Q—Well, about how wide and how deep?

A—Well, it was filled with sand.

Q—You could not tell how deep it was?

A—Very little depth to it.

Q—I am speaking of the water and not of the sand?

A—I am speaking of the water.

Q—Well, how deep was the water there at that time?

A—Oh, near as I can recollect, it was a foot deep.

754 Q—A foot deep, and how wide?

A—I am not positive.

Q—About how wide? The whole channel, wasn't it; about how wide?

A—I think about 40 or 50 feet.

Q—And that was what month do you think, July?

A—Yes, sir.

Q—July, 1880. At what point of that channel do you speak of? how far from the slough?

A—I speak of a short distance from the slough.

Q—How far?

A—About half a mile.

755 Q—It was in the same condition at the mouth of the slough, the same amount of water was flowing at the mouth of the channel?

A—I was not at the mouth.

Q—You knew there was?

A—I should judge there was.

Mr. Houghton—Q—Mr. Crocker, one question. You stated, Mr. Crocker, that when you had the ferry boat or skiff or canoe, as you style it, was it the year 1871 or 1872? I want to fix that year; was it the year the

756 dry season of 1871, as you have testified to, or when the slough was full of water, when you had the ferry boat?

A—It was in 1871, I think.

Question objected to.

Mr. HOUGHTON—I ask him which year it was?

A—It was in 1870 or 1871. I would not be positive, as I said before.

The plaintiffs offer in evidence the following, endorsed upon the original complaint on file in this case:

"Filed May 12th, 1879."

757

R. B. STILL,

A witness for the plaintiffs, being duly sworn, testified as follows:

Mr. HOUGHTON—Q—Where do you reside?

A—In San Luis Obispo County.

Q—Do you know a stream known as Buena Vista slough, which runs from Buena Vista Lake into Tulare Lake?

A—Yes, sir; I do.

Q—When did you first visit that slough?

758 A—In 1874; I was there working with cattle for Cox and Clarke; when I first went to it I struck the slough at a point about opposite the Tule House; about opposite the Tule House; that Tule House is about 10 miles south from where Lake Tulare is now; after striking the slough we worked along south up Buena Vista slough; we were on the west side; we worked up to where the bridge is now, and crossed there; I refer to the only bridge on the slough; it is near the point of hills, and I should think about 8 miles to Buena Vista Lake.

Q—What was the condition of that slough when you 759 crossed it?

A—It was full of water; after crossing the slough we went to Deer Creek, which runs into Tulare Lake; in going through we did not go along Buena Vista slough.

Q—What was the condition of the water in Buena Vista slough at that time, from the point where you struck it in 1874, to where you left it after crossing?

A—We had to swim to cross it.

Q—Well, what was the condition of it along the slough where you were passing along it?

760 A—It appeared to be full of water; that was in April 1874; I next visited the slough in the Fall of 1864, in September; we struck the slough there where it ran into Tulare Lake, and then we worked along the west side of the slough the same as we had done in the April preceding; we went up and crossed near the same place; the condition of the water was the same again where we crossed; we crossed at the same place we crossed before; from where we crossed we followed Buena Vista slough to Poso Creek, and then worked south again.

Q—Did you follow along Buena Vista slough in going there?

761 A—Yes, sir; and then we worked south again; we crossed the slough at that time at no other point except at the bridge.

Q—What was the condition of the water running through Buena Vista slough at that time?

A—It appeared to be full of water. I was about a month in making each of those trips. We camped along from night to night on the slough. I was next there in April, 1875. We were branding calves. It was in April. We struck the slough at that time in the same place, on the west side, where it runs into Tulare Lake. We worked along up on the west side of the slough, up
762 to the same crossing. I don't know how long we were going up there, but about 8 days, stopping nights along the slough. We crossed the slough again at the same place where we crossed it the year before. After crossing it we ran along the foot-hills and came up here to Bakersfield. I was along that slough during 1875 almost all of the time until August, working and camping along in various places, between Buena Vista and Tulare lakes. We were going the whole distance between the lakes. That season we crossed the slough at different points; crossed it several times. It was full of water.

763 Q—In crossing, how would you make a crossing?

A—We would swim it. I think I remained there with the stock six months. During all of that time I was along the slough with cattle. I went there again on the 1st of February, 1877, and with cattle again, and I remained there until about the 16th of January, 1878. At that time I struck it at a point opposite the Fowler place, a little south of where we did before, on Mud Slough I think they call it. We crossed the slough and went to Fowler's place. It is on the island they call Bull Island. When we struck the slough we were on

764 the west side of it, and we had to cross the slough to get on to Bull Island. It was high enough to swim us. That was in February. I was at Bull Island two days. I then went back on the trail to San Luis Obispo Co.

Q—Do I understand you to say that you remained down along the slough all of the year 1877?

A—I was there from the 1st February, '77, the most of the time until January, 1878; a part of the time I was was pumping water for Cox and Clark; I think we commenced pumping about the middle of July.

Q—Do you know how long those pumps ran?

A—Yes, sir; they ran until about the 16th of Janu-
765 ary, and that was the time I left; I think they had ten pumps running for the purpose of pumping water for cattle; there was no water in the slough; no water running while they were pumping; from January 15, 1878, until the 7th day of April, 1878, I was back and forth all the time.

Q—Well, you were back there until April, 1878, at the same point.

A—We struck the slough where it runs into Tulare Lake.

Q—You say you were pumping, as I understand it, from July, 1877, until January, 1878; what were you
766 doing the balance of the time that you were there in 1877?

A—A part of the time we were branding calves and gathering these cattle.

Q—In gathering cattle, did you work along the slough?

A—Yes, sir; in the slough and in the swamp; after April, 1878, I worked in there about a month at that time; I was not there again until about the 1st of June, 1878; then I remained, I suppose, 3 weeks; I was gathering a band of beef cattle, and was working along the slough; I was inside on the swamp land; I think we gathered another band of cattle in July, 1878; in July,
767 1878, I was gathering cattle; I suppose I remained there about two weeks; there was lots of water there then; was there again in September, 1878; went there to brand calves in the Fall; I think I worked about a month on the slough.

Q—Were you at that time on the slough, crossing it to and fro?

A—Yes, sir; I think I again crossed the swamp in 1878. I drove some horses across there. I crossed at that time at what we call the Tule House; I

768 crossed there at that time; did not remain. I think I next went there about the 1st of January, perhaps, 1879. I was going after the horses. I only crossed there; did not remain any length of time. I was there frequently during 1879.

Q—Well, how often and how long did you remain?

A—Well, I don't know; I was there all summer off and on, branding calves and working with the cattle all summer up and down the slough.

Q—What was the condition of the water during 1879?

A—There was no water there only in holes.

769 Q—At what time did you leave there in 1879?

A—I was there in April, 1879, gathering cattle, and left there in the same month. I don't remember the last time I was there, I was there so often.

Q—Were they pumping when you were there in 1879? Did they pump that year?

A—Yes, sir.

Q—Were you there in the year 1880?

A—I was.

Q—During what part of it?

A—I was almost all over it. I was still working with cattle up and down this slough. From the time 770 I went there in 1874 up to the close of the year 1880, I should think I had crossed that slough a thousand times. I think I have crossed it on every quarter section on the swamp.

Q—I will ask you if in crossing that land you found a water channel all of the distance between Buena Vista and Tulare Lakes?

A—Yes, sir.

Q—I understand you that you have crossed it on every quarter section going through the swamp?

A—I think I have been on every quarter section in the swamp; that is, from Wible's Camp down across the 771 slough between Wible's Camp and the crossing above.

Q—Did you ever cross the slough from Mr. Wible's Camp up at any point between Wible's Camp and the crossing?

A—Yes, sir, I have crossed it above Wible's Camp. Between Wible's Camp and the crossing it was a deep slough.

Q—When you have been on that slough and the water was running in it between the years 1874 and '78, what way would the water be running?

772 A—Running north.
Q—Always?
A—I never saw it running any other way.

Cross examination of

R. B. Still.

To Mr. Garber—I reside in San Luis Obispo county. I am working there now for Cox & Clark. I am attending to their cattle over there. I should think it is 100 miles from here to where I live.
773 I was working there when I started to come here. I was subpœnaed to attend here. I mean, the Sheriff came down there and served a subpœna on me. I don't remember the date; the Sheriff of this county. I think his name was Coons. I was subpœnaed three or four days ago. No one had talked to me about this matter before the Sheriff subpœnaed me. When I was subpœnaed I was close to what I call the Dixon place. I was not subpœnaed where I live. I had just got there that evening, and camped, and was served with the subpœna.

Q—You came to Dixon's place in the course of your
774 business, but did not come for the sake of being a witness?

A—No, sir. I am working for Cox & Clark, and their cattle are on the same slough. I did not come over with the cattle; the cattle are running there, and we are branding the calves. I left home, I think, about the 7th of this month. We struck the slough where it runs into Tulare Lake. I worked along the swamp and through the swamp. I did not find a great deal of water.

Q—Did you find much water there?
A—I didn't find—not a great deal.
Q—Did you find any?
775 A—Yes, sir.
Q—How much?
A—Well, I don't know how much.
Q—Enough to swim you?

A—Yes, sir. About three miles from Tulare Lake we struck the first water, I think at the point we called Mud Slough. That is the first place we struck where there was water. We first struck the swamp right at the lake. We camped along the edge of the lake. We went right along up from the dry land until we came to

776 this water. There was no water from Mud Slough down to Tulare Lake.

Q—And you found a large stream of water at that point—at Mud Slough?

A—A large stream? No, sir; I didn't find any stream. We found a lake of water there, standing still. It is not stagnant. It is fresh water. It had no current. I suppose it was a mile long, and perhaps eighty feet wide. It was in this channel that I have spoken of that runs from Buena Vista Lake to Tulare Lake. It was not flowing at all. There was no water in this channel three miles below there. I went up about that.

777 Q—Did you find any water in the channel above that?

A—Yes, sir; we found water again two or three miles from there. We did not find any continuous body of water. We found the dry bed of an old channel south from this lake.

Q—How long did you follow that dry bed before you came to the water again?

A—We went away from that.

Q—You didn't follow along the dry bed of the old channel?

A—No, sir; we went east and struck another channel.

Q—Another different dry channel?

778 A—A different channel.

Q—Dry?

A—No, sir. I don't know what channel you would call it.

Q—Was it a channel of Kern River?

A—I would take it to be.

Q—Of Buena Vista Slough?

A—Yes, sir.

Q—That was a channel of a water stream?

A—Yes, sir. The water was standing at the time in it. There was plenty of water there. It was of differ-
779 ent depth. In places it would swim a man on horseback. It had no current. I don't know how far that did extend to. It was fresh water.

Q—Do you know where it came from?

A—Yes, sir.

Q—Where?

A—It came from Kern River. It came down in the winter, last winter.

Q—How far did you follow that water up?

A—We followed it up; worked right up that slough. We found water right up to Weed Island. There was

780 no current in it down below there. Above it was running, and it was running towards the north from Weed Island. It was a good big stream. I don't know how big it was; in places it was of different size, different depth. I suppose the channel was 60 or 80 feet wide. I did not measure it to see how deep it was. In places it was deep enough to swim.

Q—For what distance did you see that body of water north and south?

A—I suppose some 7 or 8 miles; I think so. I went to the end of it, to a point where there was no more water running down.

781 Q—How do you account for its flowing down there from the south to the north, if it was not fed by any stream or spring?

A—It was fed by a stream. The water was running down the canal, and running into the swamp; running down the canal to the north end of this sheet of water that I speak of.

Q—And then it stopped still without any current?

A—I don't know that it connected. I don't know as the stream of water got down that far. I suppose it had, or it would not have stopped. After the sheriff subpœnaed me, I came to Court here.

782 Q—Did you then talk to anyone about the matter before you got on the witness stand?

A—I heard it mentioned on the street; I have heard hardly anything else since I have been here; I suppose I have talked to people about it; several parties; I have not talked with the attorneys; never mentioned it to one of them; I never spoke to any of them, nor to any lawyer, nor did I talk to Mr. Crocker about it; Mr. Crocker is the only one I know connected with this case, and I did not talk with him, nor with anyone who had anything to do with this case; no one has asked me what I would testify to on the stand; I have seen several of
783 the lawyers, but I have talked with none of them.

Q—They just put you on the stand and asked you the questions without knowing what you would swear to?

A—Yes, sir; I suppose so. I don't know. I have talked about the matter with Cox and Clarke, but they did not know what I would testify to. I did not tell them.

I first saw this stream in 1874. I think it was in April. We were branding calves at that time. I came

784 from San Luis Obispo. I suppose I was then about 21 years old. I know I was. I was born in 1853. I don't know who was with me at that time ; there was a big crowd of us, perhaps 20. I could give the names of some of them. Mr. Cox was with us and a man named Clamp was with us, and another named Jackson, and another namedMcLean, and several Mexicans. There are none of those parties here that I know, except Cox. I think he is the only one. We all came together from San Luis Obispo Co. ; came on horseback the most of us. We had wagons with us at that time ; I think I struck the slough about where it
785 runs into Tulare Lake ; maybe a little above that ; I think about where the slough connects with the lake. I think then we went down the lake to Tulare, north, to find cattle and calves there. We first went along the border of Tulare Lake and then we came back, and worked south along the edge of the slough. We came up to the crossing where the bridge is. It is an old crossing that had been there; I don't know the name of that bridge. I think it is 7 or 8 miles from Buena Vista Lake ; but I don't know how far it is. We did not cross on the bridge ; we swam it. The water had washed the end of the bridge away, and we
786 did not get on the bridge. I don't know where Cole's Bridge is. (The witness is shown Map 4.)

THE WITNESS—The bridge where I crossed is Cole's Bridge, I think. I have not been there for 3 years. When I was there last there was a levee, and road running across there to the bridge.

Q—That is the place you went up in 1874 from Tulare Lake up along the slough. Did you go into the slough hunting your calves and cattle ?

A—Yes, sir.

Q—Gathering them together and branding them ?

A—No, sir, not that year. I don't think I went into
787 the slough—we did go into the slough, too—we did cross the slough that year, and went on to the island looking for cattle. It was swimming there ; swimming everywhere we crossed. I cannot tell how much of the swamp land was covered with water that year, but there must have been a good deal of it.

Q—Two or three miles wide, the water ?

A—No ; I don't think it was. It might have been in places. I don't know.

Q—Wasn't it a large swamp all covered with water and tules ?

788 A—Not when we crossed ; it was a deep slough.

Q—Outside of the slough, was not the water all over the country there in April, 1874?

A—Not where I crossed it. I did not cross the whole swamp land ; I went in on the islands to cross the deep slough. I don't know the name of that island. I suppose it was 10 miles south of Tulare Lake. I suppose there was 100 acres in it ; water all around it.

Q—Well, was that water all in the channel, or was it over the country outside of the channel?

A—I don't know as it was on the east side. I didn't cross it to see. The water was clear around the island.

789 The channel was on the west side of the island. The water was connected around and made an island.

Q—Well, how wide was that sheet of water there? Was it over the whole face of the country except that island?

A—No ; I don't think it was. I don't know how far the water did extend from that island, east. West, it extended about 80 feet. There was a channel right next to the island. And when we got up higher the slough was deep where we tried to cross it, swimming.

Q—Was it all confined in the banks of the channel,

790 or out in the country from the channel?

A—I don't know. We did not go into it far. Only struck in on the little islands to get feed for our horses.

Q—It was full of little islands there, was it?

A—There was some, yes, sir. I could not tell how many, I did not count them all. There was a dozen, perhaps. Those islands were surrounded by water.

Q—Wasn't the whole country then full of water there in every direction?

A—There appeared to be a good deal of water in

791 the swamp.

Q—Well, it was swamp, was it not, with water standing in it?

A—Yes, sir.

Q—Standing still, wasn't it?

A—No, sir.

Q—Standing still, was it?

A—No, sir.

Q—Was it always moving in the same direction all over the swamp?

A—I never seen it moving, only one way. I didn't

792 see any water that was standing still. It was all moving. It was all running water that I saw, running north all the time.

Q—Water in the channel or out of the channel, it was all moving?

A—It was all running water that I saw.

Q—Running right around the islands in a circle?

A—No, sir; it was running north all the time.

Q—Split and went each side of the islands, would it?

A—It would run around the islands, I suppose.

Q—When you got up to the bridge, which way did
793 the water run?

A—It was running north, all of it. I did not see any running south. I saw water south of the bridge. The water there all appeared to be running down, north, as far as I could see. We crossed right by that bridge, if I remember, the north of the bridge. I think, perhaps, it was a quarter of a mile from the bridge, if I remember right. I think the water was about 80 feet wide where it was running north under the bridge, if I remember right. It was about that where we crossed; I think it was about the same at the bridge. It was deep enough where we crossed to swim
794 us.

Q—How deep would that be?

A—Well, 6 feet would swim. It was over 6 feet there, and I should think 80 feet wide. There was quite a current. It might have been four miles an hour, or might have been more or less. I don't know; the water appeared to come from the south to the north. We did not go any further south. We then came around on the east side of the swamp; on the north-west side of it. I don't know how wide the swamp was there. We didn't go into the swamp. We only went across the slough, and went along on the
795 edge of the west side. I could not tell how wide the swamp was there; there were no trees on the other side to mark it. It was all covered with tules. It may have been 2 miles wide, and may have been 5; not 10. I did not see any place where it was 10 miles.

I don't think I was on that slough in 1876; to the best of my knowledge I was not. I think I said in my direct examination that I was not. I was in San Joaquin Co. during the fore part of 1876, working for myself. I had quit the employment of Cox and Clarke.

796 I think I was out of their employment about a year. With the exception of that year I have been in their employment ever since 1874.

Q—What time in 1878 did you strike that slough?

A—In January, 1878, I was pumping water in the slough, and was at work there in the swamp. I was at work back and forth there most all Summer. I quit pumping about the 16th of January. I was there in 1878 until October or September. There was plenty of water there in that year. I think about the same as there was in 1874. That is, in the fore part of the year, but not all of the year. It dried up and stopped
797 running in the fall of 1878; I think in August it stopped running. There was water there in August. It was not running.

Q—Was there any current at all through that slough in August, 1878?

A—I don't know. In this upper part, about the bridge, I could not say there. But in the lower part, I mean right on Tulare Lake. In reference to the lower part, I did not include away up to Wible's. I don't know whether there was water at Wible's running or not. I was not up as far as Wible's in 1878. I think I was up to Weed Island. There was water at Weed
798 Island after August, 1878. I don't remember whether it was running or not. There was plenty of water there for our camp horses and cattle. I don't know whether there was plenty for all purposes or not. There was not as much there as I have seen there. I don't think the slough was full. I don't know whether it was running or not.

Q—You can't tell whether it was running or standing still?

A—No, sir. I don't remember that it was.

Q—In 1874, did the water run there at Bull Island?

A—Yes, sir. I think it ran all the year.

799 Q—The whole twelve months?

A—I never was there in 1874 that the water was not running. I think I was there every month in the year 1874. There appeared to be as much water one time as another. I cannot say that it did not change. I don't know whether or not. I did not notice any change.

Q—As far as you recollect there was just as much water one month; the same amount every month during 1874?

800 A—I know the water was always running; always swimming.

Q—Well, as far as you recollect, there was just the same amount through the whole year in 1874, in the slough down to Bull Island, was there?

A—I don't know whether there was or not.

Q—Well, as far as you can recollect, there was no change? You recollect no change?

A—As far as I recollect, it was always swimming.

Q—Do you recollect any change taking place in 1874 throughout the year?

A—No, sir. I don't recollect of any change taking
801 place in 1874. I did not take notice of any change. In 1875 it was the same as in 1874; as long as I stayed there. I left there in August, 1875. I left there in August or September, 1875. I came back in 1877, about the first of February, I think. The first time I remember of being there in 1879, I think, was in April; I was there every month in the year 1880; I think so. There was lots of water there then.

Testimony of

F. P. McCray,

802 Re-called for further cross-examination.

Mr. Flournoy—Q—I understood you to say, when you were last on the stand, that you made a map from your field notes—your work in the field, of 1877—you made a map in 1877 and 1878, corresponding with what we call Map No. 2, from the north fork of the delta of New River up to the point, as indicated by Map No. 2?

A—That map does not show the north fork of the delta of New River.

Mr. Flournoy—You meandered from that point at that time?

803 A—I meandered from that point, sir. I don't remember how many maps I made of that from my work at that time. The map of 1877 and 1878 was made in the latter part of 1878. No. 2 is not an exact copy of that map. The map I then made does not show the sloughs as it is shown on map 2. It was made for one purpose, and Map No. 2 was made for another. I don't remember when I saw my field notes last. I did not have my original field notes when I made Map No. 2.

Q—Then how did you run out the slough; from memory?

804 A—No, sir; I had sketches of it that had been prepared previously. I was also upon the ground.

Q—I understood that you did not run over that ground again this time; that your present work was made on No. 3?

Mr. HOUGHTON—No; he said he did.

Mr. FLOURNOY—You did run over it again?

A—Yes, sir.

Q—The whole of it?

A—Such portions as I was not familiar with or needed it.

Q—Well, does not the map which you made in 1878—
805 that is a correct map, isn't it?

A—That is a correct map for the purpose designed.

Q—Hasn't it got the slough on it?

A—It has a portion of the slough upon it.

Q—What was the object of meandering the streams at that time, in 1877 and 1878?

A—I received instructions to do so.

Q—In 1877?

A—Yes, sir.

Q—You received instructions to meander the stream?

A—Yes, sir.

Q—With what view?

806 A—Just instructions to do so. These things are not always explained to the surveyor. I took notes of the meander of the whole stream.

Q—In making your map and marking the slough, was there any reason why the whole course of that meandering was not put upon it?

A—Well, my meanderings that I meandered at that time were put upon it—those that I ran along the bank.

Q—Then the map was a correct map so far as you meandered it, as to the slough?

A—Yes, sir.

Q—And was identically the same as No. 2?

807 A—This (No. 2) is taken from that. I made several maps of portions of it, perhaps sketches more than anything else. I had made sketches of a portion of the swamp previous to that.

Q—In describing the character of the channel, on yesterday, where there ceased to be perpendicular banks, what is the appearance of the country, from what you saw, to indicate that that was a place where a current ran?

A—By being lower than at other points, and although

808 it may have been wider at the extreme, it rose more suddenly from the bottom. It would rise to a level, but there would be a depression shown there very plainly to be seen. I went entirely across the swamp along there, and through it lengthwise.

Q—Clear across the swamp?

A—Yes, sir.

Q—Did you find but one line of depression?

A—No, sir.

Q—You found but one line of depression?

A—I found more than one line of depression different places in the swamp.

809 Q—Did you find numerous lines of depression?

A—In some places I would.

Q—Numerous lines of depression, such as you speak of?

A—Yes, sir.

Q—Now, what appearance did the ground present; you say there was no water in this place; what appearance did the ground present, aside from the mere fact of the depression; was it bare?

A—In the depression? Not at all times, no, sir.

Q—How did it look; grown up with tules?

A—It looked like it had tules in it. Places you
810 could not get through. It had tules in it.

Q—You did go through it?

A—Some places I did not get through.

Q—All over it?

A—Sometimes in some places there was not.

Q—How was it generally?

A—Generally in these depressions there was tules, but not always, though.

Q—Generally there were tules extending clear across?

A—Extending across the channels or depressions.

Q—And the tules were outside of the channels, were they not?

811 A—Outside of the channels in places—out in the swamp.

Q—And that same appearance of tule growth was in those other numerous lines of depression that you speak of out in the swamp as well as in where you supposed the channel to be?

A—Well, there were many depressions there that had tules within the depression; many that were detached like. They had no visible source or no direct outlet. The beginning and terminus would perhaps be

812 over level ground, but depressed somewhat, and covered with tules. Then there were channels again that might be traced for a long distance.

Q—They were frequent, too, weren't they?

A—I don't know that they were. There were a number of channels there that could be traced, but there are a good many places over the swamp—

Q—(Interrupting.) You mean a number of places that show that water would naturally flow through in case there was water? Lower than other points?

A—Lower than other points.

Q—Then what you mean by there being defined
813 channels at all places except where there were perpendicular banks, is where there were depressions and sloping banks, and, perhaps, wide channels, but indicating that it was a place where the water would naturally go, being lower than other points?

A—No, sir; that is not exactly what I mean by a continuous channel.

Q—What do you mean, precisely?

A—What is a continuous channel?

Q—Yes.

A—I say there were many depressions you would come across in going through the swamp—depressions
814 that bore the appearance of having been a portion of the slough at one time; sometimes they would spread out over level ground, so as not to be perceptible to the eye, but to trace them from above or below a continuous channel would run along, perhaps a very narrow place, but it has different depths, where it could not be crossed. At others, again, it would run over ground of different widths, where there was no danger in crossing, and it might be at some points a depression such as would rise from a centre to a level. That is a continuous channel.

Q—Did you find several such channels continuing?

815 A—There are several channels running through there that break out at one slough, and they run for a distance and then come in again. I mean by a continuous channel, that water runs along.

Q—But you cannot see the water. There was no water there when you saw it?

A—There was no water there when I saw it, but I have seen water over a good portion of it. A portion of it was dry when I made that survey.

When I did a portion of the meandering, the upper

816 end of the slough was dry. That is to say, water was not running in it, but it stood in holes.

Q—That is what I understand; now at those dry points, how could you tell when you struck the channel?

A—By having perpendicular banks. At places you could not cross in a wagon.

Q—But where they were not perpendicular banks?

A—Where they were not perpendicular banks, by being deep—4 or 5 feet deep.

Q—And from 2 to 600 wide?

A—No, sir. Along at that point it was meandered
817 where the banks are not perpendicular, as a rule it is narrower than where they are perpendicular.

The banks, although they would not be perpendicular, would be quite steep. Perhaps they would be at an angle of 45 degrees.

Take the channels from Wible's down to Tulare Lake, I should think one-fourth would be bare of any tules. The other three-fourths probably would contain tules.

There are not numerous places free from tules outside of the channel.

Went down on this land indicated on map 3 a few
818 days since. There was no current of water there.

Q—When you surveyed in 1877, did you find any current between Sec. 14 and the point at the northern part of map No. 2?

A—Yes, sir.

Q—Did you find any current at Weed Island?

A—Yes, sir.

Q—I misunderstood you then, yesterday. I thought you said just before you reached Sec. 14, the water gives out?

A—Well, I was there at different times. I did not finish my work at that time. I did not finish my work
819 in 1877 on that swamp. I found no water there in 1877. I was there the latter part of October, and in November and December. There was no current then at Weed Island.

Q—Do you speak of this channel that you have been describing from actual observation by seeing the water running in it or over it?

A—Yes, sir; I have been in it when there has been water in it.

Q—What part of it?

820 A—All over it. I don't know what parts of it. I have been over it and across it at many places. I have been through it after dark and at all times. I have not seen water running to Tulare Lake, not from Wible's to Tulare Lake, but from that portion that is represented by Map No. 2 to the junction. I have seen it running on portions of the land represented by Map No. 3 on the southern portion.

Q—How came that to be running? Where did the water come from?

A—From Kern River.

Q—How did it get there?

821 A—It came down Buena Vista Slough.

Q—How far?

A—How far down?

Q—Yes, sir.

A—Well, it came down. It ran over a portion of the land embraced in Map No. 3. It ran all over the swamp. That was in the year 1878.

Q—Didn't it come from the canal?

A—It came down the slough to the canal, and there were breaks in the canal.

Q—Wasn't this water that you saw in the current, water that was returned to the slough from the canal?

822 A—No, sir.

Q—Wasn't the water, the current that you saw, the water that had broken in from the canal?

A—That had broken from the canal? It may have been water that had broken in from the canal, water all over it, all over a good portion of it. I know there was a break in the canal at that time.

Q—Was any water running beyond the head of the canal, past it?

A—Yes, sir.

Q—Into the slough?

A—Into the swamp.

823 Q—Into the swamp?

A—Into the slough, too.

Q—What course did it take then?

A—It took a northwesterly course.

Q—Towards Tulare Lake?

A—Towards Tulare Lake.

Q—Did the water pass directly on just north towards Tulare Lake beyond the head of the canal?

A—The water was running north.

Q—Continuously?

824 A—Continuously.

Q—Did it pass directly north beyond the head of the canal?

A—At that time I was not beyond the head of the canal.

Q—How do you know it ran north?

A—The portion that I was on ran north. I was on a part embraced in a portion of the map No. 3, and all of that embraced in map No. 2.

I was at Wible's Camp. There was water also in the canal.

Q—How much water did it take from the slough?

825 A—How much water?

Q—Yes, did it take all?

A—I don't know; that water I was not paying much attention to. There was water running past the head of the canal and into the slough. It might have been running into the head-gate that they have there. The gate which they have near what they call the headquarters. I don't know about that.

Q—Could it get into the slough without going through that?

A—I do not now just remember about that. At the time of the greatest flood I was located at the

826 northern end.

Q—You were there at that time and can state the facts about that? You were there? Can the water get down into Buena Vista Slough north of the canal without passing through some portion of this canal?

A—I think there was some water running in a ditch that we crossed in going to Bakersfield; from that point it ran north in the canal. I don't know what ditch that was. It was near the end of the levee, as near as I remember; near the eastern end of the levee, of what was called the Kern Valley Water Company's levee. It was a ditch on this side, on the

827 east side of the Buena Vista Slough, the swamp tract.

Q—Now, in point of fact, has there not been constructed across Buena Vista Slough a bulkhead of such a character as that the water instead of following its natural course down Buena Vista Slough has been diverted into the canal?

A—Yes, sir.

Q—That is the fact, isn't it? and that it no longer flows unobstructed in these natural channels?

A—Not below the levee.

828 Q—Is there a large space of the swamp there that would naturally fill with water before the water would confine itself to the current, in those depressions that you speak of?

A—There are portions of the swamp where the water spreads out over a considerable area during high floods. It would fill up these portions—those detached portions where the water would be running among the tules.

Q—Would it not run there just as long as it would run anywhere else, except in the deepest channels?

A—No, sir.

829 Q—Is that country as low or lower, or as high or higher than the depressions you speak of?

A—It would be higher, I presume. Sometimes lower. As I said these depressions sometimes are on high ground. These depressions, these detached portions on higher ground than the ground on either side of them.

Q—In other words, in some places you might strike dry land right about there where there would be water on either side?

A—In some places.

Q—Isn't that frequently the case in that character
830 of slough country, swamp country?

A—I don't know that it is a rule at all. Sometimes it is.

Q—I don't say as a rule. Isn't it frequently the case down there?

A—I could not say that it is.

Q—It is, sometimes?

A—Sometimes, in that locality.

Q—Going there as a stranger, not witnessing any currents of water at all in a dry season of the year, could you readily, where the tule growth was all across the swamp, ascertain where the channel was?

831 A—I think there would be no trouble.

Q—How would you tell it?

A—I would tell it by the channel and by the depression, by the course. There are a number of depressions through there and of different lengths. Some of them are short and may have the appearance of a channel. Some of them may be longer. Some of them leave one slough and return to it again or join others; but what I would think would be the main slough, you could trace it, although it was dry.

832 Q—Did you try to trace any of the others?

A—I have been through them, and know where they were. I have crossed them when they were full of water.

Q—I ask you, going there as a stranger, could you readily tell, where the tules covered the whole surface, which was the true channel?

A—I would probably have to examine the matter closely—that is, I would have to examine the matter to determine. I would not be compelled to trace out all the depressions.

Q—How would you know when you found the true
833 one?

A—Because these depressions are not as prominent as the main one. Not always so. In some places it is more prominent, perhaps; but, take it as a rule, where it leaves the main channel, it is not so prominent at that point. Take them as a rule, they are not so prominent where they leave the main channel. They are not so prominent as the main channel, but you see that in some places they are even more prominent.

Q—Now, how would a stranger of ordinary intelligence, going through that country, covered with tule and no water running, how would he know which was
834 the true channel?

A—He would know it by prospecting.

Q—He would have to trace it out, wouldn't he?

A—I presume so.

Q—Well, you didn't trace them out, did you?

A—Well, I trailed a good many of them out.

Q—Well, I asked you just now if you trailed out the others, and you said you had not.

A—I said I had been across them. I have been over every one.

Q—But in order to be absolutely certain about it, wouldn't it require tracing them?

835 A—I have trailed them out for miles.

Q—And found some pretty long ones?

A—Some of them would be pretty long. Some of the sloughs that I speak of — some of the side sloughs would leave the main channel and then enter it again, or are entered by others. Some of these I have followed for miles along the bank.

Q—They did not turn out to be the true one?

A—They would be channels. They left the main one and entered it again. You may call that what you please.

836 Q—The main one flowing at the same time in its own channel?

A—Flowing at the same time in its own channel.

Q—Did you trace them all?

A—I have been along all of them over that portion on Map No. 2.

Q—You told me a while ago that you had not traced out.

A—I told you I did not meander those, but I have been along them.

Q—Well, how do you mean—being along them?

A—I have sectionized that country, and then in sec-
837 tionizing, or running the lines, especially when there was water in them at the time, I had to be very careful in crossing. My camp was located at certain places on the swamp, and, in going to the camp, I would sometimes, in order to avoid getting into danger, I would go along the banks until I was satisfied I could cross easily.

Q—Was it your object to ascertain where the main channel was? Was that what you were hunting?

A—It was my object to keep myself out of trouble sometimes.

Q—Very well. I am trying to get at the proposition,
838 if a man of ordinary intelligence, going there, whether he could know readily where the main channel was, when there was no current flowing and the channel covered with tules; I mean in the dry season. You told me you could do it by finding out the course and the continuity of it, and that you had done that as to the main channel, but that you had not done it as to any of the others. Now, I ask you how a man would satisfy himself what was the main channel? You tell me that you have seen those others frequently, and you sectionized the country, and that you have been along some of them for miles, and that you never meandered them
839 and never traced them, except this one?

A—I say I have been along all of them and crossed them, and that I have followed them for miles, and that in following first one and then the other, I had but little trouble in coming to the conclusion as to which was the most prominent. There were sloughs that run but a little ways. They may have no beginning or end; they will begin from an open country and end in an open country.

Q—Were you hunting for the end or beginning of them?

840 A—Not at all times.

Q—Were you at any time?

A—I don't know that I was. I was sometimes hunting for a place to cross them without getting into trouble.

Q—What I want to know is, have you ever hunted with a view to ascertaining whether there were any other defined channel, or any other channel, in Buena Vista Slough, except the one which you say is marked on that map?

A—Yes, sir. I did that the first of this month.

Q—Well, what part of the country did you examine
841 at that time?

A—The part of the country I examined? I examined the country expressed on map 3, such as I have said that I located those sloughs.

Q—You say you hunted at that time for a different channel from the one that is marked on that map?

A—No, sir; I don't mean that. I say I have hunted over it. I have visited the ground and been over it. I have visited the ground and been over to see the condition of it.

Mr. McAllister—Have you ever hunted for any other channel except this?

842 A—Yes, sir.

Mr. Flournoy—Q—When?

A—The first of this month, for one time. I first knew of this channel—a part of it—in 1877 and 1878. I knew nothing about the channels on Map No. 3 until the first of this month.

Q—Well, did you hunt for any other channel except the one appearing on the map?

A—I went over the country, crossing over it and through it. I did not trace out or trail every depression that I saw in the country.

843 Q—Then, do you know whether there is any other channel or not?

A—Yes, sir.

Q—You do know whether there is or not?

A—Yes, sir.

Q—Well, is there or not?

A—No, sir.

Q—How do you know that?

A—Not any other prominent channel, because I was through it and over it. I think there are not other channels or depressions of about as much prominence as those marked on that map.

844 Q—I understood you to say just now that there were places ?

A—I said that on that map No. 2.

Q—(Int.), We will take map No. 3 now. We will not go back to No. 2. Aren't there depressions and diversions over the slough in various places frequent ones, different from the main channel that you have marked there ?

A—Not that I have seen, sir. I cannot say that I saw any. I can't say that I saw any over that particular portion. I can't say that I particularly hunted for them.

845 Q—Now, here is what I am after. This is map 3, isn't it?

A—Yes, sir.

Q—That is where you began your work the first of the month, wasn't it ?

A—That portion of it there, that is there, has been—there is a portion of that as I have stated that was done in 1878.

Q—How much of it?

A—Two miles of it.

Q—Now, will you point out to me which channel is the main channel there on Map No. 3, from here up ?

846 what is the main channel ?

Mr. McAllister—The middle one ?

A—The middle one.

Mr. Houghton—Follow it out.

A—Running through 21, into 16, and 9 and 4, in T. 27, S. R. 22 E.; in T. 26, S. R. 22 E., it runs through 33, the west side ; the west side of Sec. 28, touching the northwest corner of 29, running diagonally across 20, touching the northeast corner of 19, and running across in a southeasterly and westerly direction in Sec-18 ; then northeasterly across 7, touching the north. west corner of 8, running diagonally across 5, and

847 diagonally northwesterly across 32, in 25 S. R. 22 E. The last section is in T. 25, S. R. 22 E., and the last preceding that is in T. 26, S. R. 22 E.

I did not survey any farther.

Mr. Flournoy—Q—Then you stated you don't know how that is beyond ?

A—No, sir.

Q—Did you run any other channel ?

A—I also ran out the channel from Sec. 20 in 27 S. R. 22 E ; through Sec. 20, Sec. 17, touching the south-

848 west corner of Sec. 8, running across the northeast corner of 7, and diagonally across Sec. 6, T. 27, S. R. 22 E.; and in 26 S. R. 22 E., it runs along the westerly portion of Sec. 31, a portion of 30, running into the easterly portion of Sec. 25, T. 26, S. R. 21 E. Then along the easterly portion, through Sec. 24, the easterly portion of 13, or middle portion of it, easterly portion of Sec. 12, and the easterly portion of Sec. 1, in that township, touching a portion of this in T. 26, S. R. 22 E.; and then in T. 25, S. R. 21 E, it ran along the south and west side of Sec. 36, through the west portion of Sec. 25, through the west portion of Sec. 24,
849 touching the northeast corner of Sec. 23, and connecting in Sec. 14. That is the western branch of the slough, and it runs out on Sec. 14, on T. 25, S. R. 21 E.

Q—What did you do with this eastern branch of Map 3? What did you do with that east branch?

A—That was run out. I ran it out to gain the general location of it. I ran it out from this Sec. 22, T. 27 S., R. 22 E., a portion of Sec. 22 and Sec. 15, across 10, and across Sec. 9 and Sec. 4, and then it came back into the middle channel. I didn't run out Salt Slough at all.

850 Mr. Flournoy—Q—How is this country in between the main and western channel?

A—I cannot say altogether as to that. I cannot say as to how many depressions it has got there. I didn't see any depressions through this portion here between Buena Vista Slough and Mud Slough.

Mr. McAllister—Q—What section is that the witness spoke of last, and what township?

A—25 South, 22 East.

Q—How was it with this portion between Salt Slough and the Main Slough?

A—I didn't go over it.

851 Q—You don't know how many of that character of depressions you speak of there are in those places named, either between the main channel and the western branch, or Salt Slough and the main channel, or between the main channel and the western branch above the connection on 32?

A—No, sir.

Q—Did you trace this slough running across Section 6, in Township 26 to 32?

A—No, sir.

852 Q—Then you don'tknow how many channels you might have found?

A—No, sir.

Q—In tracing these channels that you speak of, the main channel and the western branch, how was the tracing done?

A—Done by meandering the slough. By meandering both sloughs the first of this month, I did not find water all along there. I found it in holes and along the channel for some distance. I found no current.

Q—Then your judgment as to where the main channel is, is from the face of the country exclusively, and
853 not from what you have seen the current running in there; from the size of it—its prominence?

A—Yes, sir.

Q—Do you know anything about the altitudes or depressions?

A—No, sir.

Q—Nothing of that sort was done?

A—No, sir.

WEDNESDAY MORNING, April 20, 1881.

854 Further cross-examination of

F. P. McCRAY.

Mr. McALLISTER—This is the map of 1878, which the other side has called for. It will be called Map B. It is produced at the request of the defendants.

(The map is marked by the reporter "Map B.")

[Here insert "Map B."]

855 Mr. FLOURNOY—Q—I see figures along the line of the slough, as marked on map 3, and I do not observe it on map 2—along the course there; what do they indicate?

A—Indicate the width and depth. There are none on map 2. They were ascertained by running along on the banks; at places measuring and at places estimating. We ran no levels. It is a matter of estimation instead of actual measurement. I would be standing on the bank and would see the middle, and the depth of it. In some instances measured by the eye, but not

856 always. Part of the time it would be measured by measuring across the channel with a chain. We got the depth by setting up a rod, and setting a chain across, and then taking the middle of it. We would do this in some places where the channel was wide, and some places where narrow. If 100 feet wide in some places, it was measured, and some estimated. We would stretch the chain across from bank to bank and go to the middle of the slough with a level and rod, and thus get the average depth of it. We could, in this way, take measurements of the depth of the slough, although it was 132 feet wide, with a chain which was
857 132 feet long. If the slough was more than 132 feet wide, the depth was, as a rule, estimated. Sometimes we would measure it by triangulating the distance across. The depth was ascertained by estimating. In some places water was in it. This is an average of the places.

Q—You are not speaking of the depth of water here, as I understand you?

A—Not at all places.

Q—Does this mean the depth of water anywhere?

A—There is one point where it is 16 feet deep, where the bottom is included. That is, the water at that time was 5 feet below the surface of the ground, and it was
858 estimated, by those that were well acquainted with it, that it was at least 11 feet deep. I began this figuring on the first of the month, when I was down there.

Q—Would you be kind enough to step here, and commencing at the south end, following these figures up from the south end so that the reporter can take them down? State at each time whether it was done by estimation or measurement; on map 3 designate the places by sections and localities as near as you can.

A—In Section 20, township 27 south range, 22 east, the distance is given across the pond 600 feet, estimated; on the same section the distance is 100 feet by seven
859 feet in depth, estimated; on section 17, in the same township, the pond is given 30 by 4, measured; in the same section 60 by 2, estimated; in township 26 south range 22 east, section 31, the distance is given as 75 by 4, estimated; on the same section a width of 100 by 4, estimated; on a line between sections 25 and 30, section 25 being in township 26 south range, 21 east, it crossed the pond where it was very wide, going out 500 feet in width, estimated; on section 25, township 26 south range, 21 east, that pond is esti-

860 mated 1000 feet in width, no depth given, a large pond of water quite deep; section 24, township 26, south range 21 E, distance is 600 feet by 4, estimated; in the same section, width 80 by $4\frac{1}{2}$, that was measured; on the same section, 80 by 5, estimated; section 13, the width of 80 by $4\frac{1}{2}$, I think was estimated; All this is in the same township last given. At another pond same section, the width is given 90 by 5, estimated; on section 13, width given 116 by $4\frac{1}{2}$, that was measured; on the same section, width is given 80 by 5, that is estimated; on section 12, 90 by 10, estimated; same section, 100 by 12, estimated; on the same section, 100
861 by 12, estimated; on the same section, 90 by 10, estimated; on the same section, 80 by 10, estimated; on section 1, a width, 100 by 6, estimated; on the same section, 100 by 4, measured—that is my recollection; in township 26, south range 21 E., in the same section, section 1, 40 by $3\frac{1}{2}$, measured; on the same section, 30 by $3\frac{1}{2}$, estimated; on section 26, width, 60 by 3, I think that was estimated; that was in 25 south, 21 east; on section 36, a width of 70 by $2\frac{1}{2}$, I think that was estimated; on the same section, width 200 by 2, that was estimated.

Q—Which line of the slough, as marked upon that
862 map, is it you have been calling figures on?

A—On this, on the west side of the slough on map 3.

Q—Now, on map 3 take the centre line?

A—In Township 27, South Range 22 E., Section 21, 100 by 4, estimated; water in it; on same section, width 100 by 10, estimated; on section 4, 100 by 5, estimated —I think that was estimated; in Township 26, South Range 22 E., Section 33, 100 by 4, estimated; same section, 100 by $3\frac{1}{2}$—I think that was estimated; same section, 100 by 3, estimated; in Section 28, width of 50 by 3—I think that was estimated; 60 by $3\frac{1}{2}$, same section, was estimated; Section 20, 80 by $3\frac{1}{2}$—I think that
863 was measured; in Section 19, width given 80 by 4, that is estimated; in Section blank, where width was given 70 by 4, I think that was measured; in Section 7, width of 200 feet by $4\frac{1}{2}$, that was estimated; in same section, width of 90 by 4 was estimated; in Section 8, width of 75 by 4, that was estimated; on Section 5, width of 150 by 5, I think that was estimated; on the same section, width of 200 by 4, was estimated; same section, width of 120 by 4, was estimated; same section, 100 by 6, was estimated; on the same section, 150 by 4 was esti-

864 mated; on Section 32, Township 25 South, Range 22 East, 120 by $4\frac{1}{2}$, was estimated; the width of 200 by 5 estimated; a width of 200 by 16 estimated; there is a width in this Section 32 of 100 by 5, estimated; water in it and deep. These are all estimated (showing); these numbers are all along the centre of the channel.

Q—I see a channel making out of 4 and running through sections 9, 10 and 15, that has some marks upon it?

A—That is what we call the east channel; a width in section 9 of 80 by 5 is estimated, in township 27 S, Range 22 E; a width of 60 by $2\frac{1}{2}$, in section 10; the two
865 items of measurement on Mud Slough were estimated; there was deep water there.

A map is produced by Mr. Flournoy, and marked "C," and the witness is asked:

[Here insert Map C.]

Q—See if you recognize any of your work on this map.

A—If I made it myself?

866 Q—Yes; or the original of it?

A—I never made it. I did not make that map.

Q—You did not make map C. Did you make any original of map C?

A—I don't know that I made the original of that map. I might have made one resembling it somewhat. I have made maps of that locality. I may have made an original of that map, embracing a portion of the country, possibly all of it. My recollection is, that I did make a map embracing this area.

Q—Does that appear to be a copy of it?

A—As well as I remember. In some respects. I
867 don't know that it does any more than any other map of that locality.

Q—In what respect does that differ from the map that you made?

A—Well, I don't know, sir, really, that I can point out the difference in it.

Q—Is there any difference in it?

A—There is a difference. I don't know hardly what the difference would be in the matter. It might be a partial copy, just like traced copies of official statement from maps that are made that way.

868 Q—Does it appear to be an exact copy?

A—No, sir. It does not appear to be an exact copy.

Q—Where is the original of that map?

A—I don't know, sir.

Q—To whom did you deliver it?

A—Delivered it to Mr. Wible, as near as I can remember.

Q—Isn't that a copy?

A—I said I had platted the same ground, and in some respects it resembles a map I have made of that ground.

Q—Did you ever make more than one map of that
869 work—of that part of the country?

A—I don't remember now about that. I don't remember how that was.

Q—Do you remember making more than one map?

A—I don't remember distinctly about the matter.

Q—What is the best of your recollection as to whether there was more than one map?

Mr. McAllister—In 1878, I suppose the Colonel refers to.

Mr. Flournoy—Yes, sir; I mean the map, I don't care about the particular date. I mean a map made from the field notes of the surveys made at the time
870 that you meandered Buena Vista Slough, in 1877?

A—My recollection was that I made a copy of it. I made a map embracing, perhaps, all of this ground, and delivered it to Mr. Wible; whether he took copies of it or not, I don't know.

Q—Did it embrace any more?

A—I don't know whether it did or not. I think not. It might have embraced more. I don't remember.

Q—Didn't embrace the whole slough?

A—No, sir. It did not embrace the whole slough, because I had not surveyed the whole of the slough
871 previously. The upper part of it, or what was embraced in section 3, had not been surveyed by me previous to that time. Of that portion I never made a survey until April of this year.

Q—Therefore, whatever map you made was a map which didn't embrace this whole section?

A—Yes, sir.

Q—Now, I will ask you if map B is the map you made. (Exhibiting map to witness.) This is map B. Look at that and see if you made that map.

A—Yes, sir; I made that.

872 Q—Wasn't that map made from actual survey?
A—That was made from actual survey.
Q—When was this made?
A—In 1878. The date is given upon it.
Q—In 1878?
A—Yes, sir; as shown on the map.
Q—How far does that extend towards Tulare Lake?
A—It extends into those two sections embraced on Map 3 in T. 27, S. R. 22 E., 2 miles.
Q—This map is made from parts of survey made by you?
A—That is a map made from surveys made by me.
873 I don't remember whether that is the only one made by me of those surveys. That is the only complete map that I have made of it. That is not the only map that I have made wherein Buena Vista Slough was traced as far as Section 24.

The witness is shown map marked Exhibit C, and asked:

Q—I ask you if this be not a copy of the map made by you from those surveys?
A—I say that may be a partial copy of it.
Q—What did you do with whatever maps you made
874 at that time?
A—Gave them to Mr. Wible.
Q—All of them, whatever they were?
A—Whatever they were. I was employed there, and did such things under instructions.
Mr. Flournoy—I will withdraw the witness and put Mr. Wible on the stand.

S. W. Wible,

Called for defendant, sworn.

By Mr. Flournoy—Q—You have heard the testimony
875 of Mr. McCray; have you any other map in your possession made by McCray, from his work or surveys in 1877 and 8, except this map B?
A—That map has not been in my possession only just temporarily; and one instance was, I carried it from here down to the hotel.
Q—Who delivered this map to you originally?
A—It was not delivered. I took it up off the bench.
Q—I am not speaking of the bench. I mean in 1878. Who delivered that map to you? map B?

876 A—Well, I suppose it is the same map that I carried here from the office to the Court House. But I did not see the inside of it, until it was opened here. I did not open it. I suppose it is the same map.

Q—You understand what I am talking about. This is map B. A map made in 1878, as it shows upon its face, by McCray. He states that he delivered that map to you at the time that he made it, that he made it for you and delivered it to you. Made it for the Company and delivered it to you. Is that a fact?

A—I could not say exactly, whether that map was delivered to me and that I forwarded it to the Com-
877 pany or not. I have had it. I suppose I have had that map, but just can't call it particularly.

Mr. McAllister—There is no dispute about his having had that map.

The witness—I recognize the map.

Mr. Flournoy—Is that the only map that was delivered to you by McCray?

A—No, sir. I had different maps made by McCray.

Q—Where are they?

A—Well, I delivered them over to the Company.

Q—Where was this when you obtained it to bring to the Court House?

878 A—I brought it from the office. From Mr. Houghton's or Coghill's office. I got it at one of those places there and carried it to the Court House.

Q—Do you know where those other maps are?

A—I suppose they are in possession of the Company; of the Kern Valley Water Company.

Q—When did you see them last? any one of them?

A—Well, I could not say exactly. I have examined the maps at different times.

Q—Well, about the time? within a month?

A—Yes, sir. I looked at that map along in the office.

879 Q—I am not speaking of that map. The other maps made by McCray? When did you last see any of them?

A—Well, I have seen—there is two right behind you that I saw lately.

Q—Were they delivered to you?

A—No, sir, they were not delivered to me.

Q—I am speaking of the maps that were received from McCray. That you say he delivered to you, that he made? besides this map? and that you say you delivered to the Company, when did you last see any of those maps?

880 A—Well, sir, I cannot give you the date. I have seen some—several maps within the last month. But they were not as old as this.

Q—I am not speaking of the date that the maps may bear. Have you seen any of the maps made by McCray of this survey which he delivered to you besides this one? maps that you delivered to the Company within the last week?

A—No, sir.

Q—Within the last month?

A—No, sir. I don't think I have any copies of them.

881 Q—I am not asking you about copies of them. Don't misunderstand me. You said that McCray delivered to you several maps of his survey. Now, I ask you if you have seen within the last 30 days any of those maps except this one?

A—No, sir; not within 30 days.

Q—Then what time? When did you see them last, any one of them?

A—I saw other maps pertaining to other matters. That had no connection with this matter, particularly.

Q—Of the slough, Buena Vista Slough, I am talking about.

882 A—That had maps of Buena Vista Slough in it?

Q—Yes; that is what I am talking about.

A—I think that I have seen, or have a copy or something, of a map that has some portion of that slough.

Q—That is what I am talking about. When did you see that last?

A—I think you had it in Court here yesterday.

Q—I am not talking about what I have got. I mean that you delivered to the company. You understand that very well, Mr. Wible. I am talking about the maps that went out of your possession to the company. When did you see them last, any one of them?

883 A—Any of those maps? I could not say whether I saw them at all since I delivered them. I delivered them to the Secretary of the company, Mr. Livermore. I have not seen them since.

Q—You have not seen any map of that character except this and the others that were furnished in Court here (showing Exhibit C) within the last 30 days?

A—I recognize something similar to that which is a sketch of this pertaining to these works. But I don't think that that is—

884 Q—(Interrupting.) Have you seen any other map like that by McCray within the last 30 days?

A—I could not state that I have seen a map like that—that is, what I call a map. I think that one time I had McCray to make me a sketch for some purpose.

Q—Very well. Where is it?

A—I think I gave it to Mr. Souther. I have not seen it since I delivered it to him. That was in 1877, I think, or probably the early part of '78. It was made for the purpose—

(Q—Interrupting.) I don't care anything about the purpose. Just the map?

885 A—It was simply an outline.

Q—That is it? Just like that?

A—I didn't say that.

Q—I mean the general features of it. That is an outline?

A—Well, there is some general features there that I judge was meant for the slough down there, but it is an imaginary copy, I think.

Q—We are not examining you on that subject now. You will have an opportunity after a while. You don't know of its having got into the possession of any of the defendants in this action?

886 A—Well, no; I don't. Mr. Souther was the man I delivered it to.

Cross-examination of

S. W. Wible.

By Mr. Houghton—Q—You say that the map, or tracings of a map, that was made and delivered to Souther, was made for a certain purpose; will you state what that purpose was?

A—That map was made for the purpose of determin-
887 ing something near where the slough ran through certain land, so that I could direct Mr. Souther in some of his farming operations that he was intending to engage in.

Q—Do you know what sections those were?

A—Yes, sir; it was in regard to section 3 and section 33.

Q—Section 3 in what township: 30 south, range 24 east, or 21?

A—30, I should judge. This right here is the section.

888 Q—It is marked right before you—30, 24; right under the end of headquarters.

A—Oh yes—30, 24; yes, sir.

Q—What other sections?

A—Section 33. That is in 25.

Q—Any other?

A—Section 32. In the same township.

Q—Do I understand you to say that you recognize this as a copy of any map that was ever delivered to you, or that you delivered to Souther?

A—No, sir; I don't.

Q—You stated, though, in your testimony that you
889 had seen one map made at that time of a part of that survey, within a short time.

A—I would like to make a little statement here, but I will leave that for the present.

Q—You stated that you had seen recently a map made by McCray of a portion of the land represented on that Map B as a portion of the slough?

A—Yes, sir.

Q—I will ask you if that is the map which you refer to as having seen (showing)?

Mr. Flournoy—Q—Do you want to introduce that?

Mr. Houghton—A—I wish to show that we account
890 for all the maps that you show this witness has seen.

The Witness—A—Yes, sir; that is the map that I had reference to.

Mr. McAllister—Let us have this marked. This will be map five. We want the reporter to mark it, to show that we produce a map which is marked 5. We have not offered it in evidence.

The map is marked by the reporter No. 5

[Here insert Map No. 5.]

891

Mr. Flournoy—You say that is the map you referred to?

A—That is one of the maps I referred to.

Q—Is this the one you referred to as having been made by McCray, the sketch that you referred to?

A—Not the sketch pertaining to that. As I understand you, you were asking me whether there was supposed to be a copy or an original of that. That is what I have reference to.

Q—This has nothing to do with that?

892 A—No, sir.

Q—Is this the one you have been talking about, when you said that you had one representing a portion of the survey made by Mr. McCray?

A—No, sir.

Q—A portion of that meandering of that stream?

A—That is all above that line. It only connects with it.

Q—This map you have looked at then, that they handed you, has really nothing whatever to do with the map I have been asking about, has it?

A—No, sir, no more than it has any connection with
893 this map here, B. It is a continuation of it south.

Mr. McAllister—It is not the map that you gave Souther?

A—No, sir.

Mr. Flournoy—That is not the map that was made with a view to finding out what section that slough ran through, is it?

A—Yes, sir. But not through these sections.

Q—Is this the map you referred to when you said you had a map made to find out what sections—

A—(Int'g)—Section 3.

Q—I understand. Is this the map that was made at
894 that time to find out what sections it ran through?

A—No, sir.

Q—Then do you know when this map was made, or what it was made for? This map 5?

A—Yes, sir. I know what it was made for. It was made under my direction. That is, I gave orders for it.

Q—Map 5 has no reference to the map that you delivered to Souther, nor to any made by McCray for the purpose of finding out what sections that slough ran through? Was this made for the purpose of finding out what sections that slough ran through?

A—It was made for the purpose of connecting with
895 the slough; with those sloughs that run through these lands that I mentioned.

Q—Well, you began there at Section 3?

A—Yes, sir.

Q—Now this map is from 3 south, isn't it?

A—No, sir.

Q—Where is it?

A—I can tell exactly by referring to the connecting point (examining map 5) 24, 25. That connects here.

Q—Then, if I understand it, this is a map of Buena Vista Slough to the south of the canal?

896 A—Yes, sir.

Q—To the south of the dam and bridge?

A—No, sir; not south of the dam and bridge.

Q—There is a dam running across there just at the canal, just north of the canal, isn't there?

A—Yes, sir; north of there. If you have reference to that.

Q—And this map here (5) is a map from this point here to the south of Kern River?

A—Yes, sir; it comes in here.

Mr. FLOURNOY—Q—And that is the whole of this map? I wanted to show how that is accounted for, be-
897 ing a map of a different territory altogether.

A—Yes, sir. This is a map from this point to the southward of where Kern River enters Buena Vista Slough.

Q—And has no reference at all to any point of Buena Vista Slough which is under discussion with Mr. McCray?

A—Except the water has to pass through this to get to that.

Q—Where is Mr. Souther?

A—I don't know.

Q—What was his business?

898 A—He was a farmer.

Q—What connection did he have with that country?

A—He undertook to farm in there.

Q—He undertook to farm in there? Was he interested?

A—No, sir. I think he was one—nothing more than he was superintending the work that he was doing there. I don't know exactly whether that was his own or somebody else's. He was manager. He was superintendent of his own work or somebody else's; was superintending the work there in connection with those lands—plowing, leveeing, and so on.

899 Q—In connection with the lands concerning which evidence is offered to show that they are the lands of the plaintiffs in this action, or what lands?

A—Are the plaintiffs Miller, Lux & Crocker?

Q—Yes, sir.

A—No, sir. In other lands. He was there about some other lands. These lands that I showed you there, sections 3 and 33 and 32. I don't know whether 29 was included. I think those lands have no connection with the lands in this case. I think they are owned by other parties.

900 Q—What connection did you have with that company at that time?

A—I was superintendent of the Kern Valley Water Company.

Q—Did you order the surveys made by McCray?

A—I directed them and saw that they were made.

Q—You didn't direct any surveys made by him for Mr. Souther, did you?

A—No, sir. But I had it so as to know principally where I could furnish him water.

Q—Where you could furnish Souther water?

A—Yes, sir.

901 Q—Then this map that you delivered to Souther was not made for Souther by McCray, but for you?

A—Intended for me. Yes, sir.

Mr. Houghton—I understand that you delivered that map to Mr. Souther?

A—I did.

Mr. Flournoy—You don't know where Souther is now?

A—I believe he is somewhere about Newhall; to the best of my knowledge.

Mr. Houghton—Do you know where that map is now? Have you ever seen it since you delivered it to
902 Souther?

A—No, sir.

Q—I understand you to say that within a few weeks past you have seen another map made by McCray which represents a portion of the slough that was delineated upon map B. Didn't you so state?

A—Yes, sir.

Q—And that was the only map, as I understand you to say, that you had seen within a few weeks, is that so?

A—Yes, sir.

Q—Now I ask you if that is the map? (Map No. 5)
903 which you referred to as delineating a portion of the slough that is represented upon map B?

A—Yes, sir. A portion of it.

Q—And that is the one you refer to as having seen within a few weeks?

A—Yes, sir. That is the one.

Q—I understand that is the only one you have seen within a few weeks, with the exception of map B?

A—I had a map that partially covered that, that I have for reference.

904 Q—A copy of B?

A—Yes, sir. A copy of the upper portion of B. That is, I don't know that it is a copy of that. It was made for my use. I had no other guide for what work I required and that was the only map I had reference to.

Mr. FLOURNOY—You have that yet?

A—Yes, sir.

Q—Will you be kind enough to produce that? was that made by McCray?

A—Yes, sir. I don't know whether I have it or not. I think I have it among my papers. It was
905 made by McCray. I will produce it if I can.

Mr. FLOURNOY—If that is the case, I will suspend the further examination of McCray until I can get it. I am after the original of this map.

Mr. MCALLISTER—He has not got it.

Mr. FLOURNOY—He says he has got it.

THE WITNESS—I am not positive.

Mr. FLOURNOY—I have no right to ask Mr. McCray the question I propose, and I don't want to take the ruling of the Court on it; if we can find the map.

Mr. MCALLISTER—You mean the original map?

Mr. HOUGHTON—He says he has a copy of the map
906 made for his purposes.

THE WITNESS—I would answer to that yes. I have not got the original of Souther's map.

Mr. FLOURNOY—I understand just what you stated you had. I would like you to produce it.

Mr. HOUGHTON—Is that the original map of 1878? Map B?

A—That is what I understand.

Q—I understand the map you say you may now have is a traced copy of that map?

A—Yes, sir.

Q—Not a correct copy, but simply for reference?
907 A—Yes, sir.

J. C. CROCKER,

Recalled for plaintiffs.

The WITNESS—I desire to make a correction in regard to my testimony. I was in error in regard to my evidence regarding the swamp land district 121. I stated yesterday that I was not a trustee of that swamp

908 land district. At the time I stated it I suppose I was not. I have never been familiar with—and this is the first experience I have ever had in anything of the kind. I have always been under the impression that it was the Kern River Land Association. But I find now I was one of the trustees of the swamp land district 121.

F. P. McCray,

Re-called for the plaintiffs.

Mr. Houghton—Q—When you made the survey
909 which is represented on map "B" here, and also platted on Map No. 2, what did you take as the starting or initial point there; where did you find your initial point to start from?

A—I made a start from a point that was shown to me by Mr Wible, standing upon the end of the levee, upon the east end of it, between sections 13 and 24, on the range line. It is at the corner of sections 13, 18, 19 and 24, in township 30 south, and on the range between line 24 and 25 east. That was my starting point.

Q—Now Map No. 3; when you made this second sur-
910 vey in connection with that slough, as represented upon Map No. 3, how did you find your initial point in making that survey?

A—I took the point that I had established previously, in going through there. I took a point that is between Secs. 28 and 29 in Tp. 27 S., 22 E., a quarter of a mile east from the corner of Sec. 19, 20, 29 and 30. That was a point I had established previously in 1878. From that point we measured along the slough which is shown here on 3. And from there measured along the slough running upon the township line, between Tps. 26 and 27, S. R. 22 East. I ran up that line one
911 evening, and not being satisfied about the matter, I returned to the corner of the section — the Government corner—one that I had found and established where I had found the post, coal and mound, in 1878. And from that point I continued on the range line up between Tp. 26 south to the township corner. I didn't find the corner there, but I found a number of posts at different points, but they were lying down as they usually are, and the country was cut up by mounds made by sagebrush and vermin that burrowed there. I didn't

912 examine closely the corners, because I knew that I could not be far from them, by my previous surveys. After doing that I connected with this point that I had reached before, and I found a very close agreement. And then I went to the slough and measured from the slough and went along the banks of the slough and measured it up as far as this point — along the west of the slough to a point in Sec. 14, Tp. 25, S. R. 21 East. There the slough terminated, and spread out from that point. Then I ran northerly to a slough known as the Mud slough on Sec. 2, township 25 S., R. 21 E. Then I ran along the left bank of that slough, or lagoon, to
913 about Section Standard: and from there I ran a line out to the swamp land bounds, to see whether it was covered with tules or overflowed. In running out there I didn't examine to find the meandering line. After that I passed through to a place called the Tule House, on Sec. 32, in township 25 S., R 22 E.; and from that point I just run southerly along the east slough to Tp. 26, R. 22, and into Tp. 27, R. 22, down to where I had quit subdividing in 1878.

Q—Then all the work that you did in connection with these sloughs was connected with the Government corners?

914 A—Yes, sir; and the lines were run in connection with corners I had established.

Q—How did you establish the final point when you made the survey of the sloughs on the northern portion of Map No. 2 in the same manner?

A—How did I establish the position of the Government lines?

Q—Yes, sir.

A—That had been subdivided by me.

Q—Section lines?

A—Section lines. In sectionizing the land, which was sectionized by me, I retraced the 7th standard
915 south upon the east and west side of the swamp; and ran the range lines up on the east and west side of it, and the section lines bordering this ground. The lines were run out and definite corners found and definite connections made. Then after these connections were made and boundaries of the swamp land were established, then the subdivisions were made.

Q—In running the sloughs, which you did, in the northern portion of Map No. 2, did you run them after having made connections with the corners formerly established by you and by the United States?

916 A—I retained the locations after establishing these corners, or at the time they were established.

F. A. Tracy,

A witness for plaintiffs, being duly sworn, testified as follows:

I am about 51 years of age. I have resided in what is now Kern Co. since 1863. I passed through the northwestern part of the County in 1859, from Tulare Lake across to the western line. At that time I did not
917 touch Buena Vista Slough.

Q—When did you first see Buena Vista Slough, or the lands along Buena Vista Slough?

A—In 1860. I came to Buena Vista Lake. I struck the lake on the southwest side, about where the hills came in, on the southwest side of the lake. I was traveling through the country and looking at the country. I did not stop there at all. I came along down the lake. I followed the lake down to Buena Vista Slough, and I camped at the mouth of Buena Vista Slough that night, and the next day I traveled down 15 or 20
918 miles down the slough; before I left the slough and camped on the plains. And from there I went to San Luis Obispo Co. and away from the slough.

Q—What was the condition of Buena Vista Slough at the mouth when you came there?

A—About an average stream of water there.

Q—Which way was it running?

A—Running northwesterly; that was in the month of August; the fore part of August, I think. I was again on Buena Vista Slough in 1863. Between 1860 and 1863 I did not see it at all. In 1863, in the fall, I next came to this country. I moved stock over here; cattle
919 and horses. I stopped on Buena Vista Slough about 30 miles from Buena Vista Lake—30 or 35 miles; about six miles from Tulare Lake. I was on the west side of the slough and camped there. I remained at that camp about a month, I presume, with stock. That must have been in October, I think, although I am not positive. It was about that time. After staying there a month, I went up about 7 or 8 miles further up, south. I remained at that point during the Winter of 1863 and '64; and from there I moved up to my camp on Buena Vista Slough, further up, about three or four miles

920 from Buena Vista Lake, northwest. My camp was on the east side of Buena Vista Slough. I must have reached the camp on Buena Vista Slough about the middle of the Summer of 1864. It was about this time before I got established there.

Q—Then, were you all of the time between October, 1863, and the time you reached this camp in the middle of the Summer of 1864, along the slough?

A—Yes, sir; between the point where I first struck it and the camp; and with my stock.

Q—What was the condition of the water in the slough when you struck it?

921 A—When I struck it in 1863, I camped at a hole of water about a mile and a half long, and I camped there about a month.

Mr. Houghton—Q—Then I understand you to say you moved up 7 or 8 miles. How long did you camp at that place?

A—I camped until the next Spring. I don't remember the number of months. That would be the Spring of 1864.

Q—What was the condition of the water in the slough between the time you reached there and when you left the next Spring?

922 A—The water during that Spring ran down and filled up the slough. It ran clear through, I think, to the lake. I am not positive. I did not follow it clear down to the lake. I think I must have left that place in June, although I am not positive when I did leave; June, 1864. I went from there directly to my camp on the east side of the slough.

Q—When you were on the slough at the lower place, 6 miles, I understand you to say from the lake, were you feeding your cattle along the slough?

A—Yes, sir. I was crossing to and fro, from time to time, over this slough and through the swamp lands
923 there. And also when I was in camp 7 or 8 miles further south of that point. I had my stock on the swamp land there. I think the latter part of 1863 was the dry season, and the feed was scarce. I went once there for the purpose of getting feed. In 1864, the water came down in April, perhaps. After reaching my camp on the east side of Buena Vista Slough, in 1864, I remained there until 1867; and then moved camp again. I remained there three years. That was my headquarters there during those three years. I was taking care of stock cattle there.

924 Q—What portion of the time were you about there, living there or making that your headquarters, in connection with your movements immediately around there?

A—I think, perhaps, two months at the time. I would be off on rodeos. I would have to be away from there two months. It might have been a month out of the twelve months. I presume I was home 10 months of the time. That would hold true of the years 1864, 1865 and 1866. I was looking out for my stock at the time.

Q—Where did you run them—where were they run-
925 ning?

A—Running along the borders of that Buena Vista Slough and back in the plains. My cattle ranged down as far as Tulare Lake, and I went down as far as that in connection with my stock. The water got very low in 1864; and in 1865 it was quite low. In 1866 it was full of water. In 1867 it was quite full of water—I believe it was in 1866.

Q—When you were down with your stock along the slough in 1864, were you crossing the slough from time to time?

A—Yes, sir.

926 Q—How many different points do you suppose you crossed those years, 1864 and 1865, when the water was low?

A—In the lower part of it I was crossing and recrossing several times a day there for perhaps a week at a time, every month, for 3 or 4 months. That was in the lower part of the slough where I had left the cattle first. I then moved them further up.

Q—After you got them further up, how was it about that crossing?

A—The crossing was quite good after the water went down. It got quite dry all of the way up. That
927 was in 1864. Buena Vista Slough got quite dry. In 1866 there was a large supply of water running through there. I was still there with my stock and ranging them between the two lakes. I was there in 1867 also, and still had the stock in the same place. I left my camp on the slough in 1867. I don't remember the months, but it was along in the Fall, I think. I moved about three miles almost north from there, on to the Goose Lake Channel.

Q—Can you fix the point on this map where you

928 were from 1863 to 1867; take Map No. 1, where you camped during those three years?

A—It was about Sec. 19, T. 30, R. 24. It might have been on Sec. 24. It was on or near that place. That is about a mile south from Wible's Camp. I went 14 miles from Buena Vista Lake, and it may have been further. I expect it is.

Q—There is a point that has been referred to as the Old Tracy crossing. Where was that?

A—The Old Tracy Crossing was bordering on Sec. 24.

Q—Was it right close to your camp?

929 A—It was right close to our camp, and in the same Township, 30 S., Range 24 E. In the Fall of 1867, I moved to a point in T. 30, S. R. 25, E. (Examines the map.) It was on Sec. 4, I think. I think I remained there 3 or 4 years. During that time I was taking care of the same stock. I don't remember just when I left there. I was there in '71, at that place, and in 1872.

Q—Then you remained there until 1873?

A—Yes, sir; I think in 1873, I was there. In 1874, I think I moved further down. In 1867 and '68, I was ranging my stock on Buena Vista Slough, and also had 930 some of them on the Goose Lake side. I was ranging on both sides. I was going all of the distance along Buena Vista Slough, between Buena Vista and Tulare Lakes. I was crossing to and fro in 1867 and 1868; and during 1869, I was along on Buena Vista Slough with my stock. I had stock along on both sides of that slough, though I intended to keep them on the east side. That year I was crossing to and fro all of the while.

Q—How often did you make those crossings in 1867, '68 and '69?

A—We used to cross the slough at Tracy's Crossing. 931 We used to cross it down below Weed Island, and would cross Weed Island sometimes.

Q—When you crossed below Weed Island, how did you cross?

A—We went right straight through. In times of high water, we would go through the tules, and wind around considerably.

Q—How would you make the crossing there? Did you swim it or ferry across?

A—At my crossing above we used to have a tule

932 boat when the water was very high. Otherwise when it was not, we would go in on the bank and swim the horses through; that is at the upper crossing. I have crossed below Weed Island. When we crossed through there we went on horseback.

Q—How would you find the water at that point?

A—We would go across there without swimming, below Weed Island, by hunting for the shallow places and going around the deep places. There was another point we crossed considerably further down, and we used to cross on Weed Island.

Q—On Weed Island?

933 A—Yes, sir. Go across both branches there and go through Weed Island.

Q—In crossing Weed Island, how many branches did you find of the slough?

A—Two branches.

Q—How deep would the water be in those two branches; would you have to swim?

A—On the east branch we would have to swim, generally a little ways; on the west side we could get through without swimming.

Q—Were those the only points that you crossed the slough during the years 1867, '68 and '69, those three
934 places?

A—No, sir. I crossed below there. I crossed down almost west, I think, from Goose Lake.

Q—Well, when you crossed there, what water was there in the slough, and how did you make the crossing?

A—We would have to wind around considerably, to get across there.

Q—What would you find in places where you had to swim?

A—I think one or two places I used to swim down there if the water was high as it was in 1866, '67 and
935 '68.

Q—How many sloughs did you find in crossing at that point?

A—There are 2 or 3 sloughs down there.

Q—Two or three sloughs down there?

A—Yes, sir; that were deep. I was there also in 1870. There was a pretty good supply of water in 1870. I crossed the slough at the same points in 1870 that I have testified to.

Q—Did you find the water the same that you had in the years preceding?

936 A—I don't think there was so much water there in 1870. The same sloughs there, but lower water. I don't remember crossing it at any other places in 1870. I was there in 1871. In 1871 the water got quite low. I was surveying the full length of the stream from Tulare Lake. I was working on Tulare Lake the full length of the swamp that year.

Q—You say there was water in that slough? How far did it run that year?

A—It ran down to my knowledge—it might have run further, it ran down within 6 or 8 miles of Tulare Lake. There was a short supply of water that year.

937 Q—Did you cross the slough that season there, the same as the other seasons?

A—Yes, sir; I suppose—I don't remember particularly when I did cross it that season.

Q—Do you remember crossing that season when the water was not so deep; when there was a short supply of water?

A—Yes, sir. The sloughs were not so deep; we could get in on Weed Island at that time without swimming.

Q—You still found a slough there on both sides?

A—Yes, sir.

938 Q—When you were in there from 1863 to 1871, and you came across this water; did you find a current there?

A—Yes, sir. It was setting in the direction of Tulare Lake.

Q—Would you always find a current when the water was running in Buena Vista Slough above?

A—Yes, sir.

Q—It did not make any difference where you struck it, you found a current?

A—As far as—yes. It was always, I think, running. I had my cattle still there in 1872, and the
939 whole length of the slough. There was considerable water there, I think, that year. In 1873 there was a good deal of water, and in 1874 there was a good deal of water. There was considerable water in 1875. I don't remember whether that was a dry year or not.

Q—Were you, during the years 1872, '73, '74 and '75, running your stock along the slough the same as you were the years previous, between the two lakes?

A—Yes, sir.

Q—Were you crossing during those years from time to time, from one side to the other?

940 A—Yes, sir. I did not cross it much during those years, except at Tracy's crossing. I think the water in that slough got quite low in 1876. I think I left that place that I have designated on Goose Lake Slough along about 1874. I then moved right down on the same Goose Lake Channel on Sec. 14, T. 29, S. R., 24 E. I remained there more or less for two or three years. I left there about three years ago, and that was my home from 1874 to 1877 or '78.

Q—What were you doing between those years? Did you still have your stock along the slough?

A—Until a couple of years ago; I think about 2
941 years ago. About that time I sold out. I sold out after I left Sec. 14; perhaps the year after I left there. After moving from section 14, I had men there taking care of my stock at the time I sold out. Though I hadn't been there myself to live for some little time, perhaps a year.

Q—Then during the year 1866 or '76, you had stock along the slough?

A—Yes, sir.

Q—And you say the water was quite low that year?

A—Yes, sir, quite low that year. I don't remember that any died that year for the want of feed.

942 Q—What was the condition of the water there in 1877?

A—I think it was very low in 1877.

Q—Was there any loss of cattle during that year, 1877?

A—Yes, sir; I think there was a heavy loss of cattle there. I think that was the year I lost a good many myself.

Q—What was the cause of it?

A—The water got very low, and they had not water to drink; and they got into Buena Vista Slough where the banks were perpendicular and could not get out.
943 They went there after water to drink.

Q—What effect did drawing the water off there, or having a short supply of water, have upon the feed along the slough, if any?

A—It stopped the growth of vegetation.

Q—What was the condition of the water there in 1878?

A—Through the Summer of '78, I think it was pretty good.

Q—Were you during the years 1876 and 1877, this

944 dry year, along that slough all of the distance between the two lakes?

A—In 1867?

Q—In 1876 and '77, the two very dry years.

A—I don't remember that I was down on Tulare Lake in 1877.

Q—How is it as to 1876?

A—In 1876, I think I was down there.

Q—Then in 1876 you were all along the slough with your cattle from one end to the other?

A—In 1877 I think I went down as far as where Poso Creek enters Tulare Lake.

945 THE WITNESS—It empties into it, Poso Creek. The old slough. I went further up in 1876. I think I did.

Q—Then you were down to the lake in both years?

A—Well, I don't know as I was there in 1870.

Q—How far is Poso Creek, where you were, south of the lake?

Mr. GARBER—He says he went down to where Poso Creek emptied into the lake.

Mr. HOUGHTON—No. He went down to Poso Creek.

THE WITNESS—Where it empties into the lake, right in the lake.

Q—Then you went to the lake in both years?

946 A—Yes, sir.

Q—Then you were ranging your cattle during those years between the lakes all of the distance?

A—Yes, sir.

Q—Were you, during these years, crossing the slough at different points in 1876 and 1877?

A—Yes, sir. I was crossing in 1877 at the upper part. I was in the swamp, considerably into the tules.

Q—During the whole time that you have been on this slough, from 1863 down to 1878, how many times do you suppose you have crossed it from one side to the other?

947 A—I have crossed it a great many times. I would not know how to guess at the number of times. Perhaps I have crossed it—I might have crossed it 200 times.

Q—At how many different points do you suppose you have crossed it?

A—Well, at the upper part of the country there we generally had crossings. But below, further down, we crossed it whenever we came to it.

Q—When you was lower down, at what point would you start?

948 A—Down from where the township line between where Townships 27 and 28 crosses, about that point. From there down we had no crossings, went in through any water. And from that up we generally had crossings which we would go to, in case we wanted to cross.

Q—Then how many different points do you suppose you have crossed Buena Vista Slough at between townships 27 and 28 to Tulare Lake?

A—I have crossed that, I suppose, twenty times in one week, for one trip. I may not be there again for a month, and then perhaps the same number of times
949 again.

Q—Do you suppose that you have crossed that slough there between those points which cover eighteen miles, and on every section of land that the slough crosses?

A—I don't think I have crossed it just straight. I have traveled up and down, crossing and recrossing, probably crossing back and forth in many places.

Q—Do you think you have been on that slough on every section that it runs through between those points?

A—Yes, sir. I think I have been on the slough—
950 because it is natural for me to follow up and down the slough frequently; and in following it up and down I think I took every section.

Q—Then take it from the line between townships 27 and 28 going south, you say you generally had places to cross?

A—Yes, sir. There is one place.

Q—How many?

A—Well, from that point Weed Island was about the first place. There was no crossing between my crossing of Weed Island where we would cross from half a mile below my old crossing to Weed Island, there was
951 no crossing at that time during those years. In 1877 they did cross some, at the head of about the west line of Sec. 15, in the swamp land, there was a crossing there. That was in 1877.

Q—And previous to that I understand you to say that there was no crossing from your crossing to the upper end of Weed Island?

A—To the middle of Weed Island.

Q—How far would that be?

A—It would be about 7 or 8 miles. But I cannot

952 tell it by this map because Weed Island don't seem to be shown on it (referring to map 1.) I could not tell on this map exactly where the head of Weed Island comes. I can tell where we used to cross on Weed Island (examining the map.) It must be somewhere down here. That would be about eight miles below my crossing. That was the first crossing that we had south of my crossing prior to 1877. We used to cross again some 12 or 15 miles below the Tracey crossing. Then we had another crossing eight miles down. We used to go in the tules there—there were some islands, little islands; we used to follow from one to the other
953 and work in the deep places in the slough, and crossed some 12 or 15 miles below the place below the Tracey crossing.

Q—Then when you got down in Township 28 South, Range 22 East, where would you make your crossing? How many crossings did you have?

A—I didn't have any crossings there until I got down to what is called the Old Elk Crossing, an Old Elk Trail that is not far from the island that I tell you of. That is right at the point in the sagebrush that lies between Goose Lake and this swamp land, pretty near the township line between Townships 27 and 28
954 south.

Q—Now, what was the condition, if you know, during those years, of Buena Vista Slough from the point where it left the lake for the first twenty miles down the slough between 1863 and 1877 and 8?

A—From 1863 up to 1867 and 8, there was an open channel of water running down there.

Q—How far from the lake was that an open channel from 1863 to 1867 and 1868?

A—It was an open channel down to the centre of Weed Island; and through Weed Island was an open channel.

955 Mr. Garber—Q—An open channel down through the centre of Weed Island?

A—Down to Weed Island; through it there was a channel, but it was not well open through it.

Q—What is that?

A—It was not very well opened. There were some obstructions in there of flags that had grown up in the channel at the head of it. I mean at the head of Weed Island.

Q—How far down would that be? You say it was

956 down through Weed Island. How far would that be from Buena Vista Lake?

A—About eight miles from the crossing, the way you would go. It was about four or five miles to the lake. It would be 13 or 14 miles.

Mr. Houghton—Q—How far down that slough did you go from Buena Vista Lake before the slough divided and ran around Weed Island?

A—I think it is about 12 miles down from Buena Vista. It may be a little more. I am not exactly certain about the distance.

Q—Well, what was the condition of these sloughs
957 after they divided at the head of Weed Island and down to the range line between Townships 28 and 29?

A—Well, from the head of Weed Island up to 1868, the channel ran more directly through the land. The water went through the land. After 1868 it divided almost entirely there at the head of the island. It spread out on each side of this place in 1868. It washed out a channel to the right and left more.

Q—I understand you that prior to 1868, all of the water went through the island?

A—More water, a good deal more went than afterwards.

958 Q—Then, what was the condition of the slough or sloughs, whatever they may have been, between 1863 to 1868 from the lower end of Weed Island; that is the northern end of this township line between townships 28 and 29?

A—The water ran along in a wide channel, the most of the water.

To Mr. Garber—The water ran down to this place; the water he speaks of in the wider channel.

Mr. Houghton—Q—How wide would that channel average between those township lines we refer to between 28 and 29, in the lower end of Weed Island?

959 A—At a low stage of water it might not be more than 100 feet wide on an average.

Q—How wide would it be upon the average before it would overflow?

A—Oh, well, it would be of different width. It might run a rod wide in some places, and ten rods in others.

Q—How wide was Buena Vista Slough channel between the lake, where it left the lake and your crossing, between 1863 and 1868?

960 A—I think that that would average from 50 to 100 feet.

Q—How was it from there down where you say it was confined to one channel moving through to Weed Island?

A—Running through Weed Island and down to Weed Island, it ran very much the same. From my crossing or Tracey's crossing down two or three miles. It would average from 50 to 100 feet. And then it was not quite as wide perhaps for two or three miles more. From the head of Weed Island a portion of the water would go around in the other two channels you have
661 described to the east and west of Weed Island.

Q—After those channels passed Weed Island, east and west, would they connect with the main channel below?

A—Yes, sir.

Q—What was the condition of the channel or channels running from the township line between 28 and 29 and the next one north, between 27 and 28?

A—Well, that was a channel running through the tules considerably there. In some places it has perhaps a current.

Q—Was there a running channel that you could fo-
962 low, running down through there?

A—Yes, sir; you could follow the channel through. You could follow the channel generally through that part of the country. It was a wide channel. I don't know; it would average 100 or 150 feet; some places more; it was a wide channel running through there.

Q—What was the condition of the channel or channels on the next township north of that, which would be between 27 and 28 south, and 26 and 27 south, right opposite the township in which Goose Lake lies?

A—Well, there is a channel that is better defined than it is up here, for some distance. There used to be
963 more than one channel.

Q—How wide are these channels or the main channel there, if there was a main channel through that township?

A—It would average, I should think 80 feet wide; I know where the deep places used to cross, they were quite wide channels; some that were not so wide.

Q—What was the condition of the channel between 26 and 27 south and 25 and 26 south.

A—This eastern channel is a channel all the way through; I have seen water running the whole way;

964 running through the channel from one end to the other.

Q—From this point? (referring to map).

A—No; down here, you go around here this way.

Q—Is that ford four miles north of Goose Lake where it would commence?

A—From there down the channel is very much as represented there, I should think, on the map.

Q—How wide does that channel average that runs through that township, running through townships 26 S. and 22 E.

A—That is a channel, I should think, 100 feet wide.

Q—What was the condition of the other channel, or
965 what we call the west channel, that ran through that township?

A—Well, that was a good wide channel; quite a wide channel; so seemed to be. That is where I came over and camped. It seemed to be continuous.

Q—Were you along the length of it?

A—I remember I followed through when it was running water—that channel.

Q—You have been, I understand you, on every section of land that runs through at some time during the year, and have been down through?

A—Yes, sir; when I used to travel all over. I lived
966 on this side, on the east side. I know where the Tule house is; I have been there frequently.

Q—Does this western channel run by that house?

A—Yes, sir; it is right on the bank of the eastern channel.

Q—Which bank of the eastern channel?

A—The east bank; that is my recollection. I don't know what section it is on, no further than I see it on this map (referring to the map). It is on the map about where I should locate it.

Q—What was the condition of the eastern channel
967 where it runs through Township 25 South, Range 22 East?

A—Well, there is a perpendicular channel.

Q—How far did that channel continue on, that open channel?

A—I think it continued on to the lake. I have seen it to the lake; anyway, when the water was high?

Q—What was the condition of this channel, the western channel, where it ran through Section 25 South, Range 21 East, during the years 1863 to 1868?

A—I have crossed that when there was water in it. I never knew where it went to; I never was in there; that

968 is, I was not paying any attention.

Q—What change took place in Kern River, if any, in 1868?

A—In 1868 the channels changed up in this section of the country somewhat. When I first came to Bakersfield the main channel of Kern River, after it passed the bluffs just above Bakersfield, was running in what is known as Old River. That was in 1863. I mean the river at the head of the Stine Canal.

Q—Where did it empty into the lakes?

A—It is, the greater part of it, at the Consuelo Ranch. It is about opposite the slough between the lakes.

969 Q—After the water was discharged into the slough between the lakes, where did it run into?

A—They ran into the lakes, and from the lakes down—The outlet was Buena Vista Slough.

Q—Well, after 1868, or in 1868, you say there was a change in the river?

A—There was a change in the river. The water left that river then, and it ran down the old channel in the direction of Goose Lake, and to the township line between 26 and 27, and then it turned and one channel went into Buena Vista Slough, and the other channel went straight

970 on to Goose Lake.

Q—How long did the water continue to flow in the channel you speak of that went direct to Goose Lake?

A—To June, 1868.

Q—From the time of the flood in 1867, or the early part of 1868, until June, 1868?

A—Yes, sir.

Q—Did it ever flow through the channel after that?

A—Not much after that.

Q—At what time did it ever flow through there after that?

A—I don't know as it ever got down to my camp on

971 14 after that until it ran through the ditches.

Q—Then, you say, there was no branch of the river ran down and ran into Buena Vista Slough?

A—Yes, sir.

Q—Is that branch that you refer to what is now known as New River?

A—That is what I understand as New River.

Q—Has the water continued to run in that channel ever since 1868, and has it continued to be the main channel of Kern River.

A—That was considered the main channel of Kern

972 River. It divided, however, before it got quite to the slough, and ran in two branches.

Q—Where does the most northerly branch enter the slough?

A—It entered the slough, I should think, about Section 32, Township 30, Range 25.

Q—When those waters that were running down Kern River, or what is known as New River, along that northerly slough, after that runs into Buena Vista Slough, in what direction would that run?

A—That would run down northwesterly to Buena Vista Slough.

973 Q—In what direction did the water run that ran in the most southerly branch of that slough?

A—That ran in rather a southeasterly direction into the lake first, at any rate.

Q—Well, what became of it then?

A—When I saw it, it was running that way.

Q—After running into the lake what became of the water?

A—It would fill up the lakes, and then run out, I suppose. The tendency would be to fill up the lakes with water, it would then run out in a northwesterly direc-

974 tion.

Q—After the lakes were filled, all of the water running down the river into the lake would run down the slough?

A—Yes, sir.

Q—Where to?

A—To Tulare Lake.

Q—Now Mr. Tracy, you have given the description of Buena Vista Slough, and the sloughs where the division takes place, from where it leaves Buena Vista Lake and Tulare Lake as they existed from 1863 to 1868. Has there been any change or material change in the sloughs

975 since that time?

A—I think not; none that I remember of.

Q—What was the condition of these sloughs when you saw them, from 1863 to 1868, as compared to the last time you saw them?

A—There was no material change from the slough to the head of Weed Island in all those years. From where the sloughs come together, after leaving Weed Island, there was no change that I know of in all those years.

Q—You say there was no change below that point, was there any change above?

976 A—The water rushed out the channel that run through Weed Island in 1868, on both sides, more than it had before.

Q—What caused that, do you know?

A—Well, I think one cause was the filling up of the centre channel somewhat.

Q—Do yon know what caused the channel to fill up?

A—There was a very great flood at that time, and some drift came down into it. I don't recollect being on Tulare Lake much, or much on the borders of the lake, in 1868 or '9.

977 Q—Did you follow down to the north end of the lake during the year of the flood?

A—Yes, I have been down to the lake in 1860. During high water I was down on the lake, on the east side, I think, as far as Tule River. I was not on Summit Lake in those years. We didn't go down on that side in 1868. I have been on the slough, between Summit Lake and Tulare Lake, in 1858 and 1859. The direction in which the water would flow in the slough between those lakes depends altogether on the height of Tulare lake. I have seen the water one continuous sheet of water from Tulare Lake by Summit Lake, and down Fish Slough to the
978 San Joaquin. I saw the waters there in 1857, 1858, 1859, 1860 and 1861. I went through there in 1863, but I don't remember what years the water was the highest, but I think it was in 1862 or 1863 that I saw this immense sheet of water. I have seen water flowing through Tulare Lake, and all of these channels that I speak of, into the San Joaquin River. I think it was in 1862 or 1863, or 1861 and 1862; I am not certain. I don't know what the name of the channel is running between Summit Lake and Tulare Lake. Now the channel running out of Summit Lake to the north is Fish Slough. I used to live on that; used to have a ranch there.

979 Q—How far down does Fish Slough continue from Summit Lake?

A—You can trace it clear down to the head of Fresno Slough. But it runs pretty well out there for two or three miles. I think it is about thirty miles from Summit Lake to Fresno Slough.

Q—What do you mean by saying that Fish Slough runs out two or three miles before it reaches Fresno Slough?

A—Well, it has no channel apparently, though you can see the waters run there over the tule land. It used to.

980 Q—Were you along what you called Fish Slough, and around through over that tule land? Where does it run to?

A—It runs into Fresno Slough. I think the distance that the waters run along from Fresno Slough is nine or ten miles to the San Joaquin. The San Joaquin runs into the Bay of San Francisco.

Q—Is that Fresno Slough a continuation of Fish Slough, with the exception of those two or three miles that you speak of, where it runs over and through tule land?

A—I should think it was. It has every evidence of
981 being the outlet of Fish Slough. The waters run northwest in Fresno Slough, into the San Joaquin, and in Fish Slough they are running in about the same direction.

Q—I understand you to say, when you first came here, in 1863, that the waters of Kern River were running through what is known as Old River into the channel connecting Kern and Buena Vista lakes?

A—Yes, sir; they divided there. I never went right into the lake at that point. They ran right in an open channel through the tules, in the direction of the
982 lake. 1864 was the first year, I think, that I became acquainted with the channel. I did not come up here in 1863.

Q—Then the waters would go in where?

A—Into Buena Vista Lake.

Q—And from Buena Vista Lake?

A—Into Buena Vista Slough.

Q—And running through Buena Vista Slough, where would they run to?

A—Into Tulare Lake, and would run from there on through Tulare Lake and into the San Joaquin.

Q—Was there any change as to where the Kern River
983 would discharge, by reason of the flood of 1868? Would that change in the river make any change as to where the waters of Kern River would eventually discharge?

A—No. It would make no change eventually in where that would eventually discharge.

Q—Did you ever go down Buena Vista Slough in a boat?

A—I used to have a boat on Buena Vista Lake.

Q—Well, did you ever go down the channel in a boat?

A—I have went down some distance. I never went down quite as far as Weed Island. I have been down

984 there trying to get cattle out in very high water. I have been down six or seven miles from my camp on the bank. I have also been on the slough above my camp, and up as far as the lake. I was at one time on the river, and have been on the slough above there considerably with a boat.

Q—Have you ever been on Buena Vista Slough, below Weed Island, in a boat?

A—Yes, sir; we were crossing over on tule boats frequently.

Q—Was that all?

A—I don't remember of having one only at one other
985 place. I forget what that boat was. That is where the lake came by what we call the hog camp; we had a boat there. I have forgotten what kind of a boat it was we had crossed in.

Q—You have land along that slough, haven't you?

A—Yes, sir.

Q—Do you know the quality of land along Buena Vista Slough?

A—Yes, sir; I am acquainted somewhat with the quality of the land. It is good land.

Q—How long have you been in the cattle business—
986 raising cattle?

A—I first commenced to raise cattle in 1857, and have been engaged in it ever since, I might say. I am nearer out of the cattle business now than I have been before. I am familiar with the business of raising cattle in this country. I think I am, and with the necessities of cattle, and the necessary amount of water to raise them on. I have run my cattle along Buena Vista Slough. I brought them there in the dry season and ran them.

Q—Do you know what kind of land is necessary to raise cattle, and the amount of water required to couduct the business in connection with them?

987 A—Oh, yes.

Q—What was the effect upon the land when you had them, the short seasons of water during the years 1867 and 1868, or 1866 and 1867?

A—Well, there was a shorter growth of grass.

Q—What was the effect upon the cattle, by reason of the short growth of grass?

A—They didn't do so well.

Q—What would be the effect upon those lands in case you should turn all of the water out of Buena Vista Slough, so that no water would run down through the

988 slough and over those lands?

Mr. GARBER—I object to the question, as calling for the mere opinion of the witness, and as being hypothetical and not calling for the facts.

Objection overruled. Defendant excepts.

A—I think that land down there without water would be entirely valueless for raising cattle. I have been a farmer, and have been cultivating land; have been interested in farming for years, which was from 1852 to 1857. I was then in San Joaquin county. I have been engaged in farming, also, in this county for some time, though not direct with my own hands, in this valley. I have a farm
989 here now. I think I have been farming five or six years.

Q—Are you familiar with land and the capacities of land for agricultural purposes?

A—Yes, sir.

Q—Then what would be the effect upon the land, as agricultural land, if you should turn all the water out of Buena Vista Slough, and prevent it from flowing through?

A—I suppose it would not be worth anything for agricultural purposes.

990

Cross-examination of

MR. F. A. TRACY.

Mr. FLOURNOY. Q—You have been, as I understand it, comparatively familiar with Buena Vista Slough, from the old Tracy crossing to Tulare Lake, ever since 1863?

A—Yes, sir.

Q—Has there been at all times during that time a continuous current of water through Buena Vista Slough from the Tracy crossing to Tulare Lake?

991 A—No, sir.

Q—At times has there been?

A—In 1863 and 1864, and 1871 and 1877. I think those are the years that it has been comparatively dry.

Q—What portion of the year 1863, was that the condition?

A—It was quite late in the fall of the year, that I was there, and then I found the water standing in holes; the one that I stopped on, I think it was about a mile and a half long; it remained in that condition until toward the spring of 1864. I reached there about

992 October, 1863; I should think it was as late as that anyway; it may have been the first of November.

Q—About what time the following spring—it remained up until what time following spring?

A—It might have been something near April, perhaps after the water of '64 ran down, and I was camped on the slough there, and it filled up, passed my camp, and left me on an island; ran around me.

Q—What time did it fall into holes?

A—Pretty early in the season; quite early; I was running cattle from San Luis Obispo at that time; and along about July, I think, it got down; at any rate, by
993 the last of July it was in holes; it remained in that condition until 1865, I think. It was late in 1865. That year I think that Col. Baker put the dam in the slough. That was quite late in 1865; it may have been March; about March, 1865, I should think, when I raised the cattle; 1871 was the next dry season we had, I think; there was plenty of water in 1865, for stock purposes all through the swamp, but I did not stay up there long that year, and I have forgotten what time it did drop into holes that year; but there was water there, a great while, in 1865. The slough being dammed off that year, I think it made a
994 little difference.

Q—It was not out of the holes a great while in 1865?

A—Not a great while.

Q—How was it in 1866?

A—There was a good deal of water went clear through and filled the entire slough full, I think, that year.

Q—Did it fall into holes at any time during the year 1876?

A—No, sir; I don't think it did.

Q—Then in what time in 1867, well, in 1866, did it
995 spread out over the swamp?

A—Considerably, not fully, I don't think.

Q—Did it spread outside of the slough?

A—Spread outside of the sloughs some.

Q—In 1867, what time did the rains come?

A—1867; it was high water all the year through.

Q—All the way through, over and outside the slough?

A—Yes, sir. That was not the year of the flood. The flood was about the last of 1867.

Q—Well, that was so in 1868?

A—Oh, yes, sir.

Q—The whole year around?

996 A—The whole year around. It did not fall into holes at all in 1868. I don't think it did in 1869. In 1870 it might have stopped running through, but I don't remember exactly about that. It was getting lower. In 1871 it really dried up, and was in holes along towards the latter part of the summer. I should think it remained in holes until the middle of the winter; perhaps until after Christmas; about Christmas, somewhere along about the last of December, we had a heavy rain. I think the water was scarce enough that year to require pumps. I think Mr. Crocker had pumps at that time.

997 Q—Lasted through the summer until, you think, after Christmas, in holes?

A—Yes, sir. In 1872 there was a good deal of water; considerable. I don't think any pumping was necessary. I think the water ran clear through. I don't think it fell into holes at any period during that year. In 1873 there was plenty of water, and there was plenty of water in 1874. The water during those years was outside of the slough. In 1875 I think we had plenty of water. It may have been getting lower and receding at that time. I don't know but it receded considerably in 1875. It was more confined to the

998 channels. I think it was mostly confined to the channels in that year. It was drier in 1876. It went into holes, I think, and pretty early in the season, I think, of that year, perhaps in July, and may be in June. It continued that way until in the fall some time. I think that is the year that I ran a pump, and I think that they stopped pumping along, perhaps, in the latter part of November, 1876. 1877 was a pretty dry season, I think. It was a very dry season. It might not have been so dry. I might have been mistaken about 1876 being so dry. I think 1877 was the year that I ran the pumps, but I am not positive about that

999 now. It went into holes in 1877 pretty early in the season. I cannot tell exactly, but I suppose it must have been, perhaps, in June or July. I don't remember how long it continued. It may have been until November. If that was the year I pumped it was about November that I stopped pumping. I think there was a rise about that time. I don't know what was the cause of that water rising down there at that time. I moved about 1200 head of cattle up to there that year, I think. I moved them off in the spring of the year, 1877.

1000 Q—Why did you move them off in 1877?

A—Feed was getting very short. It was in the spring and everything looked doubtful. In 1878 it was better. We had no pumping to do in 1878. There may have been a pump on the ranch, but there was plenty of water in the slough. That is my impression. I don't remember whether it fell into holes in 1878. I don't think I was down there much in 1878. I think there was plenty of water there in 1878.

Q—How was it in 1879?

A—I don't know as I was there once during 1879;
1001 I don't think I was on the slough that year; I don't remember how the river was up here during that year. I think there was a fair head of water in the river in 1879; that is my impression. I was not down on the slough during 1880; I crossed Buena Vista Slough in 1879 and 1880; just crossed Cole's bridge, and came back; there seemed to be considerable water there then; it was running northerly from the head at that time towards Tulare Lake. I don't remember what month it was; it was early in the spring; cold weather; the grass had already started somewhat, and I presume it was in February. The lakes had considerable water
1002 in them; they were fairly full. I think that was in 1879. There were swans on the lake, and they had boats on the lake there, and there were some hunters there, and hog men. The last time I was down there the water was running under the bridge and northward; I think that was in 1879; I was not down there in 1880; I have not been there this year.

Q—Now, you have been down there and are familiar with it ever since 1863. Isn't it a fact that there has been, taking one year after another, a matter of uncertainty whether there would be any water running down there the greater portion of the year?

1003 A—It has been a matter of uncertainty; there are certain years it did not run, since I have been acquainted with it. The facts are just as I have related them, as near as I can remember. I have crossed Kern River since the 15th; I think it was last Saturday. The water was quite well up, quite high; quite a good head of water running in Kern River.

Q—How does that correspond with the other years you have been speaking of, that you are familiar with?

A—I have seen it a number of years not so high as

1004 it is now; the majority of the seasons I have been here; I think it is higher now than the average. I crossed it at the bridge. I think it is higher at present than the majority of seasons since I have been here. I crossed the bridge at Bakersfield, on the road running north from Bakersfield; the one near the railroad bridge, just above it; about a mile, I should think, above it.

Q—You think the stage of the water is now better than average seasons?

A—Since 1864, yes, sir; since 1864. I visited this river first up here in 1864. That is the only bridge
1005 that I ever knew, and there is no other bridge in that immediate vicinity.

Q—When the water would rise out of these hills and come down, it would not take much of a rise to put it out over the swamp, would it?

A—No, sir; not a very great rise.

Q—These channels that I speak of—you spoke of channels; there was quite a large number of channels through that swamp, wasn't there?

A—Yes, sir.

Q—And the water of course would have a tendency as it would rise, to spread itself out into those different
1006 channels?

A—Yes, sir. As soon as it rises it runs out. The channels were scattered all through it in every direction. There are a great many channels through that swamp.

Q—In places before reaching Tulare Lake, doesn't the channel pretty nearly play out?

A—There is one side that it is really better defined. to the lake, than a portion of the rest of the distance. That is the easern channel. It is quite an open channel into the open waters of the lake, the eastern
1007 channel.

Q—What do you mean by an open channel?

A—Without tules. An open channel that has no tules growing in it for a distance.

Q—Don't the tules cross there in places from Wible's camp to Tulare Lake?

A—Yes, sir; there is the main channel. What we used to consider the main channel has some tules in it in places; flags generally. Flags will grow in the water. We used to trace the channels some by the flags that seemed to grow in the water better than the round tules, so that we could always find watering places. That is what I regard the main channel.

1008 Q—But there was a variety of channels through there?

A—Yes, sir; there was other channels diverted from the main channel, and entering it again, and so forth.

Q—Have you ever selected any particular channel with a view of tracing it?

A—Not all of the way through; no, sir.

Q—Not all of the way through? It is a general impression you have from crossing and passing to and fro over the country?

A—Yes, sir; in camping along, picking out my camping places, I have attempted to get on what I call the
1009 main channel in three or four different places that I have camped on.

Q—Very frequently you would find the water not running in portions of it?

A—In 1863 I found it not running. In 1864 it was running only a short time.

Q—In these years that you have named?

A—Yes, sir.

Q—What is the character of the land around there below Weed Island, the general character?

A—Generally tule land.

Q—All across?

1010 A—And little islands, little high places and some wire grass on the high places.

Q—It is low land, not counting the islands or knolls?

A—Yes, sir?

Q—Full of holes?

A—Yes, sir. There is along these side channels, deep places, where in the fall, I suppose, they have been washed out quite deep quite long.

Q—A number of deep and long holes outside of the main channel?

1011 A—Yes, sir, sometimes you will find them outside the main channel, holes with water in them all around. They have lakes, a sort of disconnected lakes, when the water is up.

Q—What is the character of the soil below Weed Island?

A—It is a very rich soil.

Q—Much alkali?

A—Considerable alkali in places. There are places on the eastern side that there is a great deal of alkali. You will find spots of it on either side. I think it has the appearance of being more in places than in others.

1012 That is in the high places, where it is almost universally alkali; quite strong with alkali.

Q—When did you first notice, Mr. Tracy, that the cattle were dying out in the swamp land there?

A—Where did I first notice that the cattle feed was?

Q—Yes.

A—I didn't notice it much in 1864, and I think that was the driest season we ever had. There was not so much stock here, and I didn't notice it so much. I think I noticed it more, perhaps, in 1871 than I did before, or 1877, somewhere along there.

Q—Stock was increasing all of the time, wasn't it, in
1013 that locality, very much?

A—It was from 1870 until the drought of 1876 and 1877. There was a decrease in 1871, a great many died that year; after that there was a constant increase up to 1876 and 1877.

Q—Do you know what caused the death of the stock at that time? I believe you stated something on that subject?

A—Yes, sir; I think it was the want of water a great deal; perhaps short feed, too.

Q—And the want of feed, too?

A—Yes, sir.

1014 Q—Was there any disease among the cattle at that time?

A—There was a disease among the cattle, you might say, from 1870; I lost a good many fine cattle. They died all over Kern County, the valley part of Kern County, and it might have extended further. I don't know what I attributed that disease to. It was a fever of some description, a sort of epidemic, and it became quite general here. It may have existed here before 1870. It made its appearance ever since, more or less, until 1878 was the worst season for it. It was pretty
1015 bad up to 1878, somewhere along there.

Q—You have not been there since 1878?

A—Not to manage stock or look after things of that kind.

Q—Were they not dying all around the country in 1877, too?

A—They were dying throughout this——

Q—I mean this portion.

A—The valley portion of this county, yes, sir.

Q—There was plenty of water in Kern Lakes and Buena Vista, was there, in 1877?

A—There was water in there, quite considerable water in 1877; I think there was.

1016 Q—In 1870?

A—I think there was plenty of water in Kern and Buena Vista Lakes in 1877, and the cattle in the vicinity of the lakes died just the same. It may have been a little worse along the borders of Kern Lake in this immediate vicinity, on the east end of these lakes, than it was any where else in the country. I think it was a little worse along the lake than it was below—north.

Re-Direct-Examination of

1017 Mr. Tracy.

Mr. Houghton. Q—I understand you to say that this disease that prevailed among the cattle commenced about the year 1870?

A—I think that is about the time that I noticed it most, anyway.

Q—What proportion of the cattle died from that disease during that year, do you think?

A—I think it might have been 5 to 10 per cent. of the cattle might have died in that way in this section

1018 of the country down there.

Q—What percentage died during the years 1871, 1872, 1873, 1874, 1875 and 1876?

A—Well, it didn't amount to a great deal. It did not amount to much of a percentage. They were dying several from the hundred. I don't know hardly how many. I don't think it would amount to more than 5 per cent. I think possibly in 1876 and '77, possibly, 10 per cent. died from that disease.

Q—What was the average percentage of loss of cattle on the slough, on Buena Vista Slough, during the years 1876 and 1877 from all causes?

1019 A—Well, I should think there might have been, I have an idea it was nearly 40 per cent.

Q—What was the cause of the death of the other 30 per cent?

A—I think it was from the want of water and feed, and some of them mired down; a good many.

Q—You say during the years 1871, 1872, 1873, 1874 and 1875, that the number of cattle increased on the slough down there?

A—Yes, sir.

Q—How many cattle do you suppose there were

1020 along these lands on Buena Vista Slough during the year 1875, from Tulare Lake up to Buena Vista Lake?

A—I think there must have been 30,000 or 40,000 head of cattle through there in all.

Q—How many were there during the year 1876; the first dry year?

A—Well, there had not been much increase along that time. It was about the same number.

Q—How many was there the second dry year, 1877?

A—There was a large loss then. There were 35,000 there in 1875 and '76.

Q—How many in 1877?

1021 A—Well, there was as many, it seems to me. The only estimate I remember was from people that had cattle there; about what each one had.

Q—Were not a great many cattle driven away from there during the year 1877?

A—Yes, sir; cattle were driven away from there during 1877; that was the year that Miller, Lux and Crocker drove a great many of their cattle away, and I think Cox and Clark drove some of their's away,

Q—Then they didn't have as many cattle there as they had the two years preceding?

A—No, sir; they didn't have as many.

1022 Q—How was it with you?

A—Well, I didn't have as many.

Q—Was there any loss of cattle from starvation or want of water, between the years 1871 and '76, on that slough?

A—No; from the raise of water in 1877.

Q—Take the years 1872, 1873, 1874 and 1875, was there any loss of cattle from want of water or starvation during those years?

A—No, sir; I don't think there was, nor from want of feed.

1023 Q—I understand you to say, Mr. Tracy, that during the years 1871-2-3-4 and 5 the water ran through Buena Vista Slough all of the season to the lake?

A—No; 1871.

Q—Well, take 1872-3-4 and 5?

A—Yes, sir. It ran through the lake, I think, all those years.

Q—Was there any larger flow of water? You have said that the flow of water in Kern River at the present time was as great as the average years, or greater than since 1863. How would the flow of water along Kern River to-day compare with the flow of water the

1024 same season of the year during the years 1872–3–4 and 5?

A—It is greater now than it was any of those years, I think. I am not positive about those years so much so as I am of 1865–6–7 and 8; 1867 and 1868 was the greatest flood we ever had. Before that they were good sized; 1866 and '67 they were not as high as now at this season of the year.

Q—You say that the water commenced to dry up down there from the channels in 1876?

A—In 1876; I think that was the time.

Q—What was the cause of the failure down there in
1025 1876?

A—In 1876? I think we were using a great deal of water that year; that that was one cause of it; using it in ditches for irrigation above the slough.

Q—That is, higher up the river? What was the cause of the channel drying up, and the water ceasing to run down there in 1877?

A—I presume the same cause in 1877, though I am not positive about that; but I suppose that that was the cause of it. Let me see; it ran dry——; yes, I think that was the cause of it, but there was not such a very great rush of water from the mountains that
1026 year.

Q—Was there enough water from the mountains that year, had it been permitted to run down to the slough, to have run from Buena Vista Slough to Tulare Lake in 1877?

A—That is my opinion, that there was; in 1876, I think, there was plenty that year to have went through; it might have been a failure in 1877; it might not have gone through; it is my opinion that it would have gone through, if there had been no water used in 1877.

Q—You have spoken of a Baker dam that was put
1027 up there that caused a drought for a short time; erected in 1865. How long did that dam stand there?

A—That dam stood there from 1865 to some time in 1866, about a year. The new Tracey crossing on New River, is on Sect. 24, T. 30, R. 25. That is the crossing on the present channel of New River.

Q—Mr. Tracey, could you have taken a boat during the year, or at the time you speak of, when the water was running from your crossing down Buena Vista Slough into Tulare Lake, and then from the lake and down through the connecting slough to Summit Lake, and from Summit Lake down through a continuous slough,

1028 then connecting through the Fresno Slough into the San Joaquin; could you at that time have taken a boat from your crossing and gone right through into the San Joaquin River?

[Defendants object to the question as leading and improper.]

Objection sustained; plaintiffs except.

Q—What portion of the land you have spoken of as being alkali along Buena Vista Slough, would be affected by that, so that it would not be good land for feed or for agricultural purposes?

A—On the east side of it there is some considerable
1029 along the margin, I should think a quarter of a mile wide, that is very strong of alkali.

Q—How is it on the west side? That would be confined right along on the margin of the swamp land?

A—Yes, sir; it would cut across those corners, taking part of the swamp land and part of the Government land.

Q—Then there is a belt of swamp land—I mean of alkali land, running right along on the east line of this swamp land?

A—Yes, sir; and also on the other side is also a belt
1030 of alkali land following along. That seems to be a little further back as a general thing. It may not be much of it on the swamp land on that side.

Q—Well then, what per centage of that swamp land would be affected by these alkali streaks?

A—There would not be more than one-twelfth, perhaps; one-twelfth of the whole body of land. The nearest point on Kern River that I know of, where pine or cedar timber grows, to Buena Vista Slough, is 40 miles away; it must be more than 40 miles. There may be some up through the cañons; I have not been up through there. There is no such timber growing
1031 between where the river comes out of the cañon and Buena Vista Slough. There are also pine trees growing on the Coast range and the Mount Diablo range, and within six miles of the oil wells; right on the line between Kern County and San Luis Obispo County, almost due west from here.

Mr. Flournoy. Q—What was the effect that this disease had upon the cattle, that you speak of?

A—They generally died.

Q—I mean, did it weaken them?

A—They died quite soon after they got the disease, the most of them I knew of; some of them were very fat when they died.

1032 Q—What were the symptoms of it?

A—They had a fever, and some would lie down in the water, in my part, and would droop around sick.

Q—They had a disposition to go to the water?

A—Yes. No; not particular that I know of. That is, the only time and only cases I knew cattle to lie down in the water, was with that disease. I suppose they had a fever and tried to cool themselves off in that way.

Mr. Flournoy. Q—You speak of the water being taken out in 1875 and 1876 by ditches. What year was it you say that the water was lower in the stream
1033 by the use of ditches?

A—I think it was in 1876 or '77. I think those are the years. I think that——

Q—What ditches?

A—I think that the Kern Island Irrigating Company, and I don't know hardly what ditches. There is a Buena Vista Ditch. The ditch of the Kern Island Irrigating Company comes out of the South Fork. I think the ditch taken out of Buena Vista Slough to Wible's Camp was started in 1876. The water was very low at that time. I think during the years 1876 and 1877 the Kern Island Irrigating Com-
1034 pany were using a great deal of water, and the Stine irrigating ditch, I think, and the Buena Vista was using considerable water. Those are both quite large ditches.

Q—Do you know of any other ditches of your own knowledge that were using it?

A—I don't remember; I think there was. I don't think I saw any ditches at the time they were using water at that time. I had to cross them occasionally. I think that was the year.

Q—Did these ditches prevent any water from running down the slough?

1035 A—Yes, sir; it prevented the water when it was being used for irrigation, somewhat; the ditches I have named.

Mr. Houghton. Q—How long after the attack of this disease before the cattle would die?

A—I think they would die in two or three days. I have hardly ever noticed one being sick longer than that. Once in a while one would get well.

Q—Then it was nothing with which they would linger along any length of time?

A—No, sir. They would not linger along and once in a while one would get well.

1036 Q—What was the flow of water in this river all of the year during 1878, compared to what it was in 1872, 1873–'74 and '75?

A—I don't remember, I think there was a pretty good flow of water in 1878.

Q—Do you think there was as much water flowing down the river that year as there was in the years 1872–'73–'74 and 1875, those years?

A—I should think it might have been about the same, 1872 for instance. I think there was about the same flowing in 1872 as in 1878.

Mr. Garber. Q—Where was it you think there
1037 was as much water flowing in 1878 as in 1872?

A—In this crossing here. We used to come around there to get across.

Q—How was it in 1879?

A—I was not around the river much in 1879.

J. M. Lewis.

A witness for plaintiffs being duly sworn, testified:

To Mr. Houghton—I reside on Poso Creek, Kern County. I first passed through Kern County eighteen years ago.

1038 Q—When did you first come to or visit what is known as Buena Vista Slough, running between Buena Vista and Tulare Lakes?

A—I think I crossed it in 1862; driving stock and horses. I struck it at what is called the Tule house. That is on the south-west side. I did not remain there any length of time. I crossed that slough at that point to the west side.

Q—What kind of a crossing did you find there?

A—I found swimming water at that time. I think as well as I can recollect, it was in April or May. I
1039 then went to Visalia, and came back to the slough again the same year, and struck the slough at what is called Bull Island.

Q—How far from Tulare Lake?

A—At that time I suppose it was about two miles, or a mile and a half, perhaps. The water in Tulare Lake was then higher than it is now. I was on the northeast side—this side. I crossed the slough at that time and went on the southeast side.

Q—What kind of a crossing did you find there?

A—We found on the west side swimming water.

Q—And on the east side?

1040 A—No; on the east side we forded very deep, coming up midside to our horses, or more. Upon the west side we found swimming water. I think that was in June. I stopped on the west side of the lake and helped to gather some cattle. We did not go to the slough again until the next year, 1863; it was in the spring, some time, that I went. We struck a slough then at what we always called the Staten Slough; that is on the west side of the slough. I suppose it was about ten miles south at that time from Tulare Lake; may be twelve miles. I was there at a rodeo, gathering cattle. I presume we remained there per-
1041 haps one day and a night; then we worked down the slough again towards Tulare Lake. We didn't come up the slough any further.

Q—What was the condition of the water in the slough at that time?

A—There was plenty of water there at that time, but I did not cross it at all; I worked down on the west side of Tulare Lake. I came back to the slough next, I think, in 1866; I was not there from 1863 to 1866; I came back in 1866, there, to help some parties gather cattle and brand calves and such like. We struck the slough down at the west corner of Tulare Lake; we
1042 were on the west side of the slough, right at the edge of the lake. From there we worked up to Buena Vista Slough, up to Tracey's crossing; I suppose we were ten or twelve days going up there; I mean the old Tracey crossing on Buena Vista Slough; during that time we were camped along the slough. After crossing at Tracey's crossing we went on down on the east side. We forded at the Tracey crossing; I think that was in June. There was considerable water there at that time; it was running northwardly to Tulare Lake. After crossing we worked down on the east side of the slough to Tulare Lake. I presume we were about the
1043 same time going down that we were coming back—ten or twelve days—perhaps not so long. We were camping along on the slough. During that trip I did not cross the slough at any other point except Tracey's crossing.

Q—What was the condition of the water along the slough as you went up on the west side and down on the east?

A—There was considerable water on the sloughs. The sloughs were full.

Q—Was it running all of the distance to Tulare Lake?

1044 A—Yes, sir; there was water running at that time. I don't think I was on the slough again until 1871. I think I went there in April. We struck the slough at that time at what is called Crocker's Corral, at the head of Staten Slough, and I believe it was at that time called the Staten Corral. I think it was about 12 or 15 miles from Tulare Lake, on the southwest side of Buena Vista Slough. From there we went up the slough some 10 or 12 miles. I was gathering cattle along there. I was there perhaps a week or ten days. After gathering cattle I went back to San Luis Obispo County. I crossed the slough at one place in going
1045 up that ten miles; I think to somewhere between where we struck it and what is now called Adobe Hole. It was dry where we crossed. We found some water that year in ponds in the slough, but in very few of them. I don't think I was on Buena Vista Slough again until 1876. I was there in the spring of 1876. I struck the slough on the southeast corner of Tulare Lake; remained there one night, and then went along up the slough—went up some 15 miles, I suppose; may be 20. I don't think I went up over 20 miles from the Lake; not to exceed 25 miles; and then went to the Sacramento ranch over in San Luis Obispo County. I think
1046 I was there a week or something like that. I was gathering cattle. I crossed the slough there at one place. I found swimming water. That was in 1876. I think it was in April. I crossed over to the little islands and back again. I went down there I think next, sometime in September, 1876. I struck the slough then at the Tule House. The Tule House is on the north side—on the east side of the Eastern channel of the slough. It is right on the margin of the channel. I don't know how long I did remain there; I presume over night and one day, or something
1047 like that. I was taking some cattle down there. Then I went back to Poso Creek. I did not cross the slough at that time. We drove the cattle across, but we did not cross ourselves. There was water, plenty of it, to swim some of the cattle.

Q—When did you again visit the slough?

A—Well, I was there, off and on, all of that winter, the fall and winter of 1876. I was there attending cattle during the winter of 1876. I did not remain there all winter. My headquarters were at Poso Creek; I was there in 1877. I was there most all of the year. I was pumping water—running pumps. I commenced pumping in July,

1048 1877, and we pumped until the 27th of February, 1878. The sloughs were dry during 1877. The first part of 1878 was dry. We stopped pumping on the 27th February, 1878; we continued pumping until that date.

Q—Did you remain there after that?

A—Yes, sir; off and on. I was there frequently; once a week, perhaps once a month, looking after stock, branding cattle, &c. We were up and down Buena Vista Slough. We would gather them up, Rodeo cows and calves, and take them to the corral and brand them. When I was there in 1878 I crossed Buena Vista Slough. I went up the slough towards
1049 the lower end of Weed Island, perhaps within a mile or a mile and a half of Weed Island. I think that is as high as I went. I went as high as Weed Island in 1877. I was up there as far as Weed Island once or twice in 1877. I don't think I was quite up to Weed Island in 1878. I think I was opposite Weed Island on the west side, and perhaps opposite on the east side. I was on the slough in 1879 at a number of places. I had a pump running there in 1879, pumping. The pump was located at the Tule House. I commenced to pump about the first part of May, 1879, about the 10th or 12th.

1050 Q—How long did you continue to pump?

A—I pumped on until—I would like to recall one remark I make about pumping until the 27th of February, 1878.

Q—What was that?

A—I made a mistake.

Mr. McAllister—Correct it then.

A—It was not in February, it was in January, on the 15th, 1878. I quit pumping, in 1877.

Q—What time in 1877?

A—I think it was about the 15th of January.

Q—Instead of the 27th of February?

1051 A—Yes, sir.

Q—When did you commence to pump in 1879?

A—About the 12th of May.

Q—How long did you continue pumping?

A—Until the 27th of January or February in 1878—in 1880.

Mr. Garber. In February of what year?

A—Of 1880.

Mr. Houghton. Was there any water running down the slough between the time you commenced pumping in 1877, until you ceased pumping in 1878?

1052 A—No, sir.

Q—Was there any water running down the slough from the time you commenced pumping in 1879, until you ceased to pump in 1880?

A—A very short distance. There was none coming down as far as I was.

Q—Were you up and down the slough in 1879?

A—I was there a portion of the way; yes, sir.

Q—How far?

A—I was up to Ebberly's camp at one time; what is called Dover's camp now, on the west side. I was not above that; I only crossed the slough at my camp at
1053 the Tule House. I was on the slough during 1880, all of the year, myself; that is, off and on, I was working there with stock. I was working principally on the east side, between the head of Tulare Lake or Goose Lake, and the lower end of Weed Island.

Q—What has been the condition of the channel that runs along through the body of the swamp land of Buena Vista Slough, running along this body of swamp land, since you have known it, from Goose Lake to Tulare Lake?

A—Generally it has been confined pretty well to the channel, all of the way down.

1054 Q—What is about the average width of it?

A—I suppose from 80 to 150 or 200 feet.

Q—What was the average depth?

A—I declare I could not tell you; perhaps it would be six feet, perhaps seven.

Q—When the water has been running down that channel during the years that you have been there, in the channel, has there been any current?

A—Yes, sir.

Q—Which way was the current running, or setting?

A—Running north, towards Tulare Lake.

1055 Q—How far above Goose Lake have you been on that channel?

A—Well, I have been as high as the Tracey crossing on the channel. I can hardly say how far I followed it up. I crossed it back and forth.

Q—At how many different points have you crossed that channel above Goose Lake?

A—Well, I declare I could not tell you the number of times I have crossed it. I have crossed it at a great many different points. I have crossed it several thousand times, I presume. I presume at every section of land there is between Goose Lake and Tulare Lake, on every half section and quarter section.

1056 Q—What is the nature of the channel where you crossed it above and between Goose Lake and Weed Island or Tracey's crossing?

A—It seems to be mostly confined to the channel; I have noticed wherever I have crossed it, that it seemed to be a deep channel; confined channel; it seemed to be a well confined channel where I crossed it.

Q—How many channels are there running there, that would carry water between Goose Lake and Tulare Lake?

A—There are two channels.

Q—Which is the larger one of the two, or main
1057 channel?

A—I don't know which is the larger; I don't think there is a great deal of difference; if anything, I think the west side is a little larger, perhaps. I was on the sloughs in 1876 and 1877.

Q—Were there any cattle died there in those years?

A—In 1877; yes, sir.

Q—How many? What percentage of the cattle that were on the slough died during the year?

A—I think it was 50 per cent.

Q—What was the cause of their death?

A—Starvation.

1058 Q—What caused them to starve?

A—Want of feed and water.

Cross-examination of

J. M. Lewis.

To Mr. Garber. Q—What years did you say, Mr. Lewis, that you were on that slough?

A—In 1862 was the first time I crossed there; I was
1059 back there again in 1863 and 1866, and 1876 and 1877, and from then on, more or less, all of the time.

Q—1877, and ever since?

A—Yes, sir; all of my work has been there since; I have been at work nowhere else, only at my headquarters and at my headquarters about Poso creek, that is close to the slough, some ten miles away; I have been working for Cox and Clarke.

Q—How do you fix these dates?—have you referred to anything to fix them, so that you could be sure whether you were right or not?

1060 A—I have not, any more than referring to my mind, my head.

Q—Have you been thinking over this to be sure that you had your years right?

A—No, sir; I have not.

Q—Before you came on the stand you thought over it so as to fix your dates?

A—No, sir; I have not been bothering my head about the dates, because I thought I had it fixed in my head so that I could recollect it when I was asked.

Q—I suppose you were questioned about this before
1061 you came on the stand?

A—No, sir.

Q—Didn't any one go over this with you?

A—No, sir.

Q—Nobody ever asked you before you got on that witness stand what years you were on that slough?

A—No, Sir.

Q—Nobody?

A—Nobody; no sir.

Q—You never told any one?

A—No, sir; because I presume that everybody knows
1062 pretty near as well as I did myself, that knows me since I have been here, I have had no occasion to tell any one. I was there, next after 1862, in 1863 and in 1866. In 1864 I was in San Luis Obispo County. I was down on the Astro Creek. That was principally my home at that time. I was looking out for stock there for other parties, for a man named Yoakum. He is now dead. In 1865 I was up in Sacramento, California. I was not doing much, if anything. I was sick during most all of the time. In 1867 I was in San Luis Obispo County again. I was at home in 1867, in San Luis Obispo County. I was at work as usual.
1063 I was working principally for myself at that time, driving a team for myself in San Luis Obispo County. I was on the road between different places in San Luis Obispo and Hot Springs. I was there pretty much the whole year; every month that year. I was there a couple of years, all of the year 1868, and teaming between those places; I had one team. I disposed of that team in 1869, somewhere along in the fall. I did not team during the whole year in 1869. The balance of the year I was not doing anything. I had my men driving my team. I was laying off.

Q—Where were you driving that year?

1064 A—I was in San Luis Obispo, in the town of San Luis Obispo. In 1870 I was in Sacramento. I don't know as I was doing anything much; like a good many others, loafing around. In 1871 I came to this county; I did not come in any one's employment. I came here in hunting employment. I came here in March. I got employment a few days after I came, and went to this slough.

Q—Commenced pumping right away after you got there in 1871?

A—No, sir; I didn't pump any in 1871.

Q—Was there any pumping done there in 1871?

1065 A—There was some. I came there to help some parties gather cattle. I was there perhaps a week on the slough. I think it was along in April or May; I am not positive which of those two months; I am sure it was one of the two. I was on the slough from the Staten Corral up to the adobe holes. There was not any water there then. There might have been a little mud in the bottom of the deep sloughs, perhaps muddy water; that was all. I saw no water there except that year. I suppose they were pumping water. I had nothing to do with the cattle that year in the tules. In 1872 I was up to Sacramento again. I went up

1066 there with stock. I don't remember what month it was. It was in the spring, along in the fore part of the season some time.

Q—How long did you stay in Sacramento?

A—I was up in that part of the country until 1876. I was working a part of the time, and a part of the time in the Eastern States. In 1877 I was, a part of the time, on the road betwixt here and Sacramento. I was in Marysville in the fall. I know I was there in December. In 1873 I was, a part of the time, in Missouri. I went there on Christmas; started there on

1067 Christmas, 1873. Before that, in 1873, I was at Sacramento and Marysville, and on the road. I stayed in Missouri three, four, or perhaps five months, and then I went to California, to Marysville, and stayed there the best part of a year. In 1875 I was down at Sacramento.

Q—At what time did you leave Sacramento?

A—I did not leave it at all. I stayed there the whole year, at Sacramento. I left the 20th March, 1876, and came to Tulare.

Q—Seeking employment?

A—No, sir; I already had it. I had it before I came

1068 here. I was employed by Cox and Clarke, the men I had worked for the year previous. They employed me in Sacramento, that was in March, 1876, to come here.

Q—When did you come on the slough that year?

A—I got here about the 10th of April; some time in April; the fore part of April.

Q—How did you fix that date?

A—From the time I left Sacramento.

Q—How did you fix the time you left Sacramento?

A—I know the date; I have got the date on my book; I know the time I left Sacramento; I had it in
1069 my book.

Q—Have you the book?

A—I had at that time. I don't know that I have seen it lately.

Q—When did you see it?

A—Perhaps a year or so ago.

Q—You have not seen it for a year or so?

A—Perhaps I have; perhaps I have not.

Q—Have you or not?

A—Well, perhaps I have. I don't think I have seen it for a year or so. I could see it very quick if I was
1070 at home.

Q—That does not assist you very much in fixing the date?

A—I left Sacramento the 20th March. I put it down in my book. When I went to the slough I struck the slough at the south-west corner of Tulare Lake. I was there eight or ten days, or two weeks, working along up from there to Staten Slough. There was plenty of water there—swimming water anywhere that I noticed it or went into it. I went up as high as what we call the Staten Corral, some 15 miles from Tulare Lake.

Q—During the whole 15 miles you say the water was
1071 running a swimming current?

A—It was, wherever we struck it. I only crossed it one time; I was not in it but once, and that was in April, 1876. I only saw one channel at that time, and at that time I saw it once, and only once.

Q—Did you see the channel at any more than one place?

A—Yes, sir.

Q—How many places?

A—I presume over 100.

Q—What was the width of it?

A—50 or 200 or 250 feet, perhaps. I don't know the

1072 depth of it, except the place I went in; it swamped me and my horse. That is the only place I went in. It was running swiftly.

Q—Was there any place there that was spreading out all over the swamp land at that time?

A—I did not see it. On the western side of it, it was not.

Q—Was that all inside of the banks of the channel?

A—On the western side it was; on the other side it was covered with tules. I don't know whether the water was there or not. I stayed there eight or ten days. I did not go back that year. I then went up to
1073 Sacramento, and I stayed there perhaps a couple of months. I then came back to this place. When I came back again I struck the slough at the Tule House.

Q—When?

A—In September, 1876. Plenty of water then. About the same as it was before.

Q—How long did you stay there?

A—I have been there off and on ever since.

Q—How long did the water last there after that?

A—That year?

Q—Yes, sir.

A—It lasted along in July in holes.

1074 Q—You say there was plenty there in September, 1876. I understand you?

A—Yes, sir.

Q—And until July, 1877?

A—Yes, sir.

Q—About the same amount of water?

A—No; it decreased gradually—evaporated away.

Q—When did it begin to decrease after September, 1876?

A—I suppose along in October. After that time I did not pay much attention to it.

1075 Q—How was it in December, 1876; about the same?

A—No, sir; somewhat lower.

Q—Still running a swift current; would it swim you?

A—No, sir.

Q—How deep was it then?

A—In some places there was not any water and in others the water was eight or ten feet deep, perhaps.

Q—Was it running in December, 1876?

A—I don't know whether it was or not.

Q—Why can't you tell me whether it was running in 1876 as you can at all those other times?

A—Because I don't know as I paid as much attention to it.

1076 Q—Why didn't you pay as much attention to it then as at any other time?

A—I don't think I was there as often.

Q—Why were you not there as often in December, 1876, as you had been before?

A—I was at home.

Q—I thought you said you stayed there all of the time.

A—I said more or less.

Q—Were you there in December, 1876.

A—Yes, sir.

Q—Why should you notice it more at one time than
1077 at another?

A—When I crossed it I noticed it.

Q—Was the water running there at all in December, 1876?

A—If the water was running in December, 1876, it was pretty low. In January, 1877, it was in holes, not running at all.

Q—You say you left Sacramento, March 20th, 1876?

A—Yes, sir.

Q—On Sunday?

A—I think on Sunday. I would not be positive whether it was Sunday or Monday. I did not put the
1078 day down in a book. I am not sure whether it was Sunday or Monday.

Q—Might it not have been Thursday?

A—I don't know. It may have been Thursday, but it was on the 20th. In February, 1877, the water was in holes, and not running. In March, 1877, it was still in holes; in April, 1877, it was decreasing; decreasing until July it dried up, and there was not any there, and it continued dry until January, 1878. There was plenty of water when it came down. It came down in January, 1878. I think there was then fully as much
1079 water there as in April, 1876. I don't know whether more or less; about the same.

Q—How long did it continue that way in 1878?

A—Until the last of the year. It commenced to decrease along in the fall of 1878; I could not tell what time, because I was not there very often in the fall. It was getting quite low in December, 1878. I think it was not running. It was running in January, 1879. In February, 1879, it was not running.

Q—When did it commence running after February, 1879?

A—It commenced running in February, 1880.

1080 Q—Was it absolutely dry from February, 1879, to February, 1880?

A—I think it was.

Q—All the time?

A—Yes, sir.

Q—What sort of a stream did it come in, in February, 1880?

A—It came in plenty of water.

Q—How did it compare with 1876?

A—I presume it was about the same as it was in 1876. It might have been more or less. It lasted the most of the season. There was water there.

1081 Q—Until when did it last to that same extent that it was in February, 1880, without decreasing?

A—I don't think it decreased until August or September; something of that kind.

Q—August or September, 1880?

Mr. Houghton—It didn't commence until July.

Mr. Garber—August or September, 1880?

A—I say it might have been sometime in July.

Q—Was it July, or August, or September?

A—I recall September.

Q—Which was it?

A—It might have been along in July.

1082 Q—Which was it, July or August?

A—I think July; perhaps it might have been August.

Q—Up to July, or it might have been August, it continued about the same as it was in February.

A—No, sir.

Q—When did it commence to decrease?

A—The first of February, 1880, there was not any. It came in, in the latter part of February. In the latter part of February it began to come down; then I think it was about the same as in 1876; may be less, and might have been more. I could not tell you whether it was more or less, as I did not measure it.

1083 Q—You did not measure it when you told Mr. Houghton, did you?

A—No, sir.

Q—Why can't you tell me as well as you told him? Whenever he asked you about any one particular time, you had an answer ready. Why can't you do the same by me?

A—I don't know.

Q—Then you cannot tell me how much water there was in the last of February, 1880?

A—No; I was there all the month. These sloughs

1084 were full of water. I was not there during the whole of February, 1880. I was not there a great deal of the month. I went down there to take out my pump and horse power, and was in the swamp. I was there off and on sometimes two days, sometimes more. I had a man in my place down there then. I had cattle down there. I had another man looking out for them. I was there occasionally helping this man.

Q—Was the water there in 1880 about the same as in 1876; less or more?

A—It would be about the same. It would continue along, commencing to get down in July or August—
1085 commencing to decrease; and in September quit running. I don't think there was any water running there after September, 1880. It did not run any more until 1881. I don't remember when it commenced to run in 1881. This year I have been there twice, and this year to the tule house, and in that salt slough. The salt slough is six miles above the tule house—five or six miles. I have not been further than that on the slough this year at no time. I don't know when the water commenced running this year. It was down there the first time I went down, and that was the latter part of February. The last of February the banks were pretty
1086 full.

Q—A swift running stream?

A—Yes, sir; at the points I have mentioned.

Q—About the same as it was in 1862?

A—No, sir; less; considerably less. Just coming down to fill up the sloughs; yet the sloughs were not full. I saw the banks full this year at the tule house, about six weeks ago. There was not as much running there as there was in 1862. It was not running all that the slough could carry; it could carry more. It was not running over; it could carry a little more. It will begin
1087 to run out when it is full and will not carry any more.

Q—Was it running full when you saw it?

A—What I call full; within four or five inches from the top of the bank.

Q—Was that the same as it was in 1862?

A—No, sir.

Q—Didn't you tell me it was not running over, outside of the slough, in 1862?

A—Not that I recollect of. I know this, it was running very plenty in 1862.

1088 Re-direct examination of

J. M. Lewis.

To Mr. Houghton--We had ten pumps in 1877. There was one camp at the tule house, one camp a mile and a half or two miles west of it, and one camp about three miles south of this one, again, on the Staten slough; and at the salt slough I had another camp, and at the adobe holes I had another camp. I think the adobe holes are twenty-five or thirty miles from Tulare Lake at present, or more; southerly. The adobe holes are fifteen miles from the tule house, higher up on the
1089 slough.

Q--Were all of the pumps you had between those two points?

A—Yes, sir. Those pumps were erected in 1877. I presume Tulare Lake has receded five or six miles north since 1862.

To Mr. Garber—I could not tell whether it had receded ten or not. I don't think it is ten miles; I think perhaps five or six.

1090 Thursday, April 21, 1881.

Thomas L. Briggs,

A witness for plaintiffs, being duly sworn, testified:

To Mr. Houghton—I reside in San Luis Obispo County, at the San Juan Ranch. I have resided there off and on since 1859. I am 42 years old.

Q—Do you know the stream of water known as Buena Vista Slough, running between Buena Vista Lake and Tulare Lake?

1091 A—Yes, sir; I first visited that slough in 1864, in the spring, I think. I struck it somewhere near the Staten Corral; that is, about 25 miles from Tulare Lake, more or less. I don't think I can locate it on the map. It is about eight miles north of Goose Lake, and on the west side of the slough. I drove a lot of cattle over there that year. After reaching there I crossed the slough and came on up to Kern Lake. I struck Kern Lake near what is called, I think, Adobe Station. At the time I struck Buena Vista Slough the water in it was very low. That was a dry year. That was probably in March or April, I cannot tell which. I next visited the

1092 slough the next year. I struck it then at Tracy's crossing—I think it was a little above the old Tracy crossing—and crossed. Then I went to San Luis Obispo County, driving cattle. I then struck the slough on this side—on the east side; and I crossed there and went to San Luis Obispo County. I did not follow along Buena Vista Slough at that time. I visited the slough the next time probably the next year, 1866. I was getting up cattle. I struck the slough then down about the Adobe Holes, I think. Then I went right straight across a little below the Adobe Holes; right straight across the slough on east side. Did not leave it very far, and went out to
1093 the Button Willows. I did not remain there over a day. From there I went right along up, worked up the slough. I next visited the slough in 1874; between 1866 and 1874 I was not on the slough at all. I was then getting up cattle. I don't remember where I did strike the slough that year. I was on both sides of it. I was taking cattle away from there. While there I was gathering scattering cattle. I was there about a month. It was in the spring of the year. During that time I was on the slough the whole length of the slough from Tulare Lake to Buena Vista Lake. The water was high in the slough at that time. I crossed the slough. I
1094 don't think we crossed the slough but about twice. Crossed once at Tracy's Crossing. I don't remember where I did cross when I went there, but on my return I crossed at Tracy's Crossing. I think I crossed at that time at a point below Tracy's Crossing. At various places, over not the whole slough, but we had to do our work on the inside of the islands, crossing various places on the slough. In gathering cattle we would cross from the outside slough to the islands which I referred to. The water in making those crossings to the islands was very high.

1095 Q—Was there any place where you would have to swim?

A—Yes, sir; various places. We crossed to the islands from the east side. We crossed to Weed Island, to Broder Island, to Salt Slough Island, and Bull Island. Salt Slough Island is the farthest south of those.

Mr. Flournoy—He mentioned four, I think.

Mr. Houghton—I mean which of those four is the nearest to Buena Vista Lake?

A—Weed Island is the nearest to Buena Vista Lake. Next to that is Broder Island, and next to that is Salt Slough Island, and then comes next Bull Island. We

1096 crossed in to all of those islands from the east side, and in crossing we found the water very deep. There are places where we would have to swim probably 30 or 40 feet; in most of the places wider than 30 feet.

Q—Outside of the points where you had to swim what was the condition of the water?

A—In the tules, do you have reference to?

Q—Where you would not have to swim.

A—Various; two or three feet deep, I think, in the tules and outside of the main channel. During that season; I think there was one month. I think I crossed three or four times a day at various points; this was in
1097 1874, after the spring of 1874.

Q—In crossing during that month three or four times a day at how many points did you cross on to those islands?

A—Various points. I next went to the slough again in the spring of 1875. In the spring of the year, I think. I was there getting up scattering cattle. I struck the slough that year on the west side. I don't remember where it was. I remained there probably two or three weeks, gathering cattle all of that time. I went over the same ground that I had been over. I was on both sides. I crossed the slough in 1875.

1098 Q—How did you find the water in 1875, as regards the crossing?

A—Very high.

Q—Did you have to swim when you made the crossing?

A—Yes, sir.

Q—What distance would you have to swim in making these crossings in 1875?

A—Various. Outside in the sloughs, in some places, as I said before, some wider.

Q—Was it about the same as 1874, so far as the swimming was concerned?

1099 A—I think the waters were a little higher that year, 1875. During that season I crossed the slough three or four times a day; we were working in the swamp at that time. I crossed about as many times as I had done on the other trip; about as often as I did before. That would be three or four times a day. I was working in the swamp all of that time. In 1875 we would not go clear across; we went in on the islands. When I commenced gathering cattle I had to go clear across. After I got the cattle gathered I had just to cross again back on the other side to San Luis Obispo County. In 1875

1100 we were camped on both sides of the slough, gathering cattle on both sides. In crossing to the islands on the west side there was lots of water. We crossed to the same islands I spoke of before. The water was very high. We had to swim in making those crossings. We had to swim various distances. There are various islands of different width. In going to the islands in some places probably we had to swim thirty or forty yards; in other places not so far.

Q—In crossing from the islands over there on the west or east side, would you always keep crossing a channel of water—a deep channel?

1101 A—Yes, sir. I remained there three weeks, more or less, in 1875. Then I returned to San Luis Obispo County, and went back again in 1876. I was gathering up cattle and branding cattle. I struck the slough then at the Tule House. I was on that slough that year pretty nearly all of the year. I think I reached there in June. There was lots of water then, I think. I remained pretty nearly all of the year. That year again I was there pretty nearly all of the year, off and on; probably would go down to the ranch to get provisions. I was branding up cattle.

Q—Were you there every month from June to De-
1102 cember at some time?

A—I think not; I think there was a month I did not go there; a month or two. I do not remember which months, but I think it was in the winter months. I was there several months after the month of June, commencing with that month. I was branding calves, and I went at all points on the slough, and was crossing the slough that season from time to time. I don't remember what the condition of the water was, but I think there was a plenty of water. I may be a little mistaken about that. I don't think there was so much
1103 water. In 1876 I don't remember how that was, now. There was lots of water, I think, when I left in 1876. I went there again in 1877, I think. I was there pretty nearly all the time. I don't remember what time I did first reach the slough. I don't know what month. I was following up our cattle and branding up. The water was low. I don't think there was any water at all running in 1877. There was pumping going along in the slough in 1877. Cox & Clark, Miller & Lux, and Crocker, had the pumps there. There was a loss of cattle there that year.

1104 Q—How many? What proportion of the cattle there died?

A—Over half.

Q—What was the cause of it, if you know?

A—Scarcity of water and feed. I was there pretty nearly all of that year. I think I was there in 1878. I was not there in the early part of 1877. I don't remember what months I was there in 1878. I was not there long in 1878. I was not there in 1879, not to remain any length of time. I passed there. I was there during the last year, 1880. I was there in the spring and remained three weeks, more or less. I was
1105 there again in the fall. I was getting up cattle. I was on the slough from one end to the other, crossing to and fro. I have been there this year and crossed it. I have not been there very long this year. When I was there in 1877 the slough was dry. I was working up and down the slough, the whole length of it.

Q—Now, Mr. Briggs, from the time you went on that slough in 1864, until this year, when you have been passing up and down the slough, crossing it, what have you found in that slough in the way of a channel to carry water?

A—I found it a very well defined channel between
1106 Buena Vista Lake and Tulare Lake—that distance between those two lakes.

Q—Is there a channel defined there that would carry water?

A—Yes, sir.

Q—How deep is that channel upon the average?

A—From four to twenty feet deep—various depths.

Q—How wide?

A—From twenty yards to one hundred yards, in places.

Q—When you have been on that slough there, and there has been water in the channel, has it been
1107 running?

A—Yes, sir.

Q—Has it had a current?

A—Yes, sir.

Q—In what direction?

A—North.

Q—Has this current always been in that direction?

A—Yes, sir.

1108 Cross-examination of

THOMAS L. BRIGGS.

To Mr. FLOURNOY—I first became acquainted with the country in 1864. That was a very dry year. I think it was dryer in 1877. There was no water running there in 1864. There was no water running there in 1877. I think it was lower in the holes in 1877 than it was in 1864. It remained dry during all of the year 1877. Water did not run at all in 1877. In the fall of 1877, when I got there it was about the same; and the same when I left; no water run-
1109 ning at any time that I was there. I could not tell the exact time when it reached there in 1877. I was there a great many times. I was there pretty nearly all of the time. I was there I think in February and March. I think I was there in April and May, and in other months during that year. In 1866, not every month; I was gone a month. I was there in 1875. I don't remember what the condition of the water was in 1866. I was not there from 1866 until 1874. The water was plentiful.

Q—That was the year you crossed from the east side to those various islands frequently.

1110 A—Yes, sir.

Q—And worked up and down the slough from Buena Vista Lake to Tulare Lake.

A—Yes, sir. I crossed the entire slough during that time. I crossed it in going there, and I crossed it when I returned. When I returned, I think I crossed it at the Tracy's Crossing—what we call the Tracy's Crossing. I don't remember where I did cross it in going over. I don't remember what part of the channel I did strike when I first crossed it. I don't remember how many channels I struck. I struck more than one.
1111 If I crossed it I must have struck more than one.

Q—In 1875 you said the water was plentiful and you crossed it frequently that year from the West to the islands, and from the East to the islands, if I understand you. Was that a fact?

A—Yes, sir. I don't remember where I crossed it that year. But I remember that I crossed it frequently from both sides of the island. I don't remember that I made any crossings across the entire swamp, except the two that I have referred to. I don't remember how many channels I crossed in crossing to the islands from the East side; nor how many I crossed in crossing from

1112 the West side. In 1874 and 1875 there was water in the channel, not on the islands.

Q—Portions of the islands were bare of it?

A—Yes, sir.

Q—How was it in the tules in the swamp?

A—There was water.

Q—In 1874 and 1875?

A—Yes, sir.

Q—I understood you to say that in the channels the water would be pretty deep, and that it was from two to three feet deep all over the swamp outside of the islands. Is that about it?

1113 A—About the way; yes, sir; I should think.

Q—Did tules grow on the islands?

A—Which?

Q—Were the tules growing on the islands?

A—Yes, sir, at various places.

Q—In speaking of the defined channels that you spoke of, you mean by that to say that there is only one channel, or numerous channels down that stream and about it?

A—There is more than one channel; yes, sir.

Q—There are a large number, ain't there?

A—Not that I know of; not a very large number.

1114 Q—Well, how many crossings at any point; say, crossing at Goose Lake, how many channels would you strike?

A—At Goose Lake there is one pretty well defined channel—there at Goose Lake—and I think there is another one; I think there are two at Goose Lake. In crossing the slough from a point on the west side at the south end of Goose Lake, there would be two deep places that I remember, and there is another, probably a smaller one. I don't know where Epperly's hog camp is.

1115 Q—Suppose you went across that swamp land district from the west to the east, from Epperly's hog camp, how many sloughs would you find?

A—Three. There is one of them not so well defined; two well defined. The middle one is not so well defined.

Q—What do you mean by a well defined channel from Buena Vista Lake to Tulare Lake?

A—I mean at very low places.

Q—You mean simply low places?

A—Yes, sir; where there is not much tule in it.

Q—Not much tules in places, and other places tules grow over it, just like the balance, isn't it?

1116 A—No, sir; not in those places. That is the same as to both of these channels. I never traced down the channel from Buena Vista Lake to Tulare Lake.

Q—Did you ever follow directly on the line of the main channel from Buena Vista Lake to Tulare Lake?

A—I have for some distance, but not the whole distance. I call the main channel the one on the east side. It is a well defined channel. It runs on the east side of Weed Island; what I call the main channel. I have not been to Weed Island very lately. I was there last in 1880. The channel was there, and the same as before.

1117 Q—Have you noticed in your experience in the slough any change of the channel at any time?

A—No, sir. The channel in 1880 was the same as when I first became acquainted with it.

Q—In all respects?

A—To the best of my knowedge.

Q—Suppose you cross the swamp, which you did do frequently, as you say, directly across from the east to the west, crossed Weed Island and struck directly across the whole swamp land district, how many channels would you strike?

A—At one point?

1118 Q—At what point, crossing at the middle of Weed Island, right across from east to west, about how many channels would you strike?

A—There is two. One is on the east side of Weed Island. That is the main channel; and the other is on the west side, right at Weed Island. These two channels form Weed Island. There is no other channel than those two. Those channels around Weed Island have not well defined banks in all places. The banks are sloping.

Q—How many places are there that are not well defined, by well defined banks?

1119 A—I don't know. There is quite a lot of places.

Q—Can you always find the banks, and know exactly and precisely where the banks are?

A—Yes, sir.

Q—How do you know that? Did you try that?

A—I have been all over the country there, and when I see the banks I can tell them.

Q—Well, in all places that you saw the slough, you saw well defined banks?

A—No, sir; I did not say that.

Q—If there were not well defined banks, how do you know, then; how could you be certain?

1120 A—Whenever there is banks, I ought to know when I see a bank.

Q—Of course where there is a bank you can tell that. I mean where there are no banks?

A—I did not say that.

Q—If it had no banks, you could not see it?

A—No, sir.

Q—There are a great many places where it has none?

A—Yes, sir.

Q—Are not there a great many channels making out in the swamp there; sloughs breaking out from the
1121 main channel; other channels; and a great many low places?

A—Quite a number of low places; yes, sir; ponds; quite a number; lakes.

Q—It was not in ponds when you crossed it in high water, was it?

A—Yes, sir.

Q—In those places?

A—In high water it always fills up, and the water is all over the swamp then. In the high water we generally find a current moving over the swamp. There was a movement of the current clear across.

1122 Q—So that there would be a movement of the current in those ponds just as well as elsewhere?

A—When very high.

Q—Some of the ponds are quite lengthy, are they not?

A—No; not very large.

Q—A good many of them are quite lengthy, have a good deal of length to them; some as much as a mile long?

A—No, sir.

Q—Half a mile?

A—No; I don't know of any pond that long.

1123 Q—I am not speaking of ponds. I am speaking of the low places, depressions in the ground, where the water will be deeper than the water is all over the country. Then, at other points, along low places that would fill up with water; are there not a great many of those, and of considerable length?

A—I don't know of any; not very large; not very lengthy ones.

Q—What time does the tule growth commence in that swamp in the year—what season of the year?

A—In the spring of the year, generally.

1124 Q—In the spring?

A—Yes, sir.

Q—Before the spring freshets, or after?

A—No, sir; they didn't grow up without water on it.

Q—Do not grow up until after the spring freshets come?

A—No, sir; unless we have rains.

Q—If there is no rise from the river, then the tules do not grow well in the spring?

A—No, sir.

Q—What kind of feed does the swamp produce for stock outside the tules?

1125 A—Well, there is wire grass and salt grass.

Q—When does the growth of that grass begin—in what part of the year?

A—In the spring of the year.

Q—Before or after the rise?

A—It grows after the rise mostly.

Q—If there is no rise in the river in the spring, there would be a scarcity of feed, wouldn't there, in any year?

A—No, sir; this wire grass would grow if it had rains on it, without an overflow.

Q—If it had plenty of water?

1126 A—Yes, sir.

Q—But in the absence of rain?

A—Without water it could not grow much.

Q—You say it would do very well without any overflow if it had plenty of rain?

A—Yes, sir.

Q—So that some seasons, even without any overflow, it does not depend on the overflow for its growth?

A—It would grow better if there was overflow, of course.

Q—But it does not depend upon it—does it, or does it not?

1127 A—Most generally it does.

Q—Then in case there is no overflow the probability would be that the feed would be very scarce any year?

A—If we did not have any rains it would. Yes, sir.

Q—But you say it depends upon the overflow, and not upon the rains. If the rain is sufficient, then it would be good if it rained without any overflow, wouldn't it?

A—It would be good; yes, sir. That is, if we had lots of rain on it.

Q—If you had good rains it would do very well without any overflow?

1128 A—Not as well, of course; not as well as it would with an overflow and rains together.

Q—But it would do very well without any overflow if it had rains on it, wouldn't it—how is that?

A—Not as well, I don't think.

Q—Would it be plentiful?

A—Wire grass and salt grass would be plentiful, I think, if it had plenty of rain on it

Q—Do they grow all over the swamp?

A—No, sir; wire grass grows on all those portions where the tules do not grow every year.

Q—Grows only where the tules are thin and low?

1129 A—In different places; yes, sir.

Q—How would the tule grow without an overflow?

A—I don't think there would be many tules without an overflow.

Q—Then, whenever you have a good condition of things down there, it requires that all that country should be flooded every year?

A—Yes, sir.

Q—In other words, the swamp ought to have that water over it every year in order to have a good condition of cattle feed?

A—Yes, sir.

1130 Q—And without, the chances would be, unless there were very heavy rains, that the stock would suffer?

A—Yes, sir; for want of feed.

Q—Doesn't it sometimes grow and do very well when there has been overflow one year? How is it for the next season if they don't happen to have any; how does it do? We will take this year, 1881. We will say, suppose there is an overflow and the water covers the whole swamp, we will suppose; and it passes away, and the next year there is no overflow. What would be the effect; do you know? Would it remain still productive of grasses and tules?

1131 A—No, sir; I don't think it would. In order to make it successful in the way of grasses or tules, my opinion is, that it would have to be flooded every year. It takes a large body of water to flood it. I have no idea of the width of that swamp land country. I should think it would average a mile and a half wide from Wible's to Tulare Lake, more or less. I do not consider that the best country for stock when it has floods annually. Even in that condition, it is not a good country for stock. And it is worthless for stock in dry years. The stock would perish if kept there in a dry

1132 season. A great many cattle died on that swamp in 1864.

Q—Were you acquainted with it at that time?

A—Yes, sir. A great many cattle died that year for want of food and water.

Q—The same cause in 1877?

A—No, sir; the want of feed was less.

Q—What additional cause was there in 1877?

A—There was no feed at all that year. There was no disease among the cattle that year. I have known years when there was a disease among the cattle there. I don't remember exactly the years; it was during the
1133 time that I was on the swamp there; but it was not in 1864. I have been there off and on from 1874 up to the present time.

Q—If it was not in 1864, what time was it that the cattle were diseased?

A—The cattle died there when they were fat; when they ate some kind of a parsley, or something that killed cattle. In certain portions.

Q—Did you ever know of any regular disease among the cattle there?

A—Not down in that part.

Q—Not down in that country, at any time?

1134 A—No, sir. I spent pretty much all of 1877 down there. I was there a good while in 1874 and 1875, and in 1876.

Q—And you were here in 1878 and 1879? You were only there once, I believe?

A—Yes, sir; and in 1880. I have been there this year.

Q—And you have never known any disease among the cattle in that locality at all?

A—I do not, only one or two from fever there. I never found but few died, I don't think, from fever
1135 down there. It did not extend that far down, not so as to become an epidemic, or to amount to anything, or to attract attention, that I can see. 1878 was not a dry year, like 1877. I don't remember whether I found plenty of water there at that time. The feed was good, I think. I was not there in 1879. I crossed over once. I don't remember where I did cross.

Q—How did it look in 1879 when you crossed it? Did it have plenty of water?

A—I think there was lots of water; lots of feed.

Q—What time was it?

A—I don't remember.

1136 Q—Was it spring, summer, fall, or winter at the time you crossed in 1879?

A—It was in the fall, I think.

Q—In the fall?

A—Yes, sir.

Q—How did the feed appear to be, or did you notice for that?

A—I don't recollect.

Q—But the water was plentiful?

A—I think there was a little feed.

Q—How is that?

A—I think there was plenty of feed. I don't remem-
1137 ber where I crossed it that year. I think it was somewhere about Goose Lake that I crossed. I was coming this way from San Luis Obispo County. In 1880 I was there in the fall of the year and in the spring of the year. I was there in the spring two or three weeks, more or less, and about the same time in the fall. I don't recollect what the condition of the water was when I was there in the spring.

Q—How was it in the fall of 1880?

A—I understand the question. You have got me a little confused. I am trying to think.

Q—Last year, have you any recollection about it?

1138 A—I don't remember now.

Q—How was the feed?

A—I don't remember now; I think it was, though.

Q—What is that?

A—I think it was dry.

Q—At which season?

A—In 1880, last year.

Q—In the spring or fall?

A—It was in the spring and fall, both.

Q—Are you positive, now, that it was dry both of those seasons?

A—I think, to the best of my knowledge, it was.

1139 Q—Are you positive there was no water in the fall of 1880?

A—There might have been in the holes. I don't remember now. I have seen the tules when there would not be a drop in them anywhere in the swamp. I think it was in 1864 and 1877. In the fall of 1880 it was dry there. There was no water. There might have been holes with a little. There was water in the holes I think. At the tule house there was water in the holes. There was some feed that year. The feed was pretty fair in the spring. I was down there four or five years

1140 ago, but had not been there before this year. I went down to the tule house on the other side; found the water there rather scarce. But at present there is plenty there for stock, and the feed there is tolerably good.

Re-direct examination of

THOMAS L. BRIGGS.

I crossed at the tule house three or four days ago. It is about twelve or thirteen miles below Goose Lake,
1141 north. That tule house is on the slough. The slough runs on the west side of it. There was no water there on the west side of it. There was no water then running in the channel. I did not follow the slough any distance. I went north close to Goose Lake and then returned.

Mr. GARBER—Followed it up to Goose Lake?

A—Very near it. Then I crossed that swamp and followed it up, down to the side of Ebberly's camp, and then I came across. I went from the tule house to Goose Lake, and from Goose Lake I went across to the hog camp on the other side; from the camp I went up
1142 to Ebberly's and crossed over there on this side of the swamp land.

Mr. FLOURNOY—He said he followed the slough up on the other side after he crossed at Goose Lake.

A—I did, as far up as Ebberly's camp. That was about fifteen miles, probably, more or less. I crossed at Goose Lake.

Mr. HOUGHTON. Q—How many cattle were there in that swamp land down there in 1864?

A—About 50,000 head to the best of my knowledge. There was a larger number in 1864 than in 1877. A great many parties who owned cattle towards the coast
1143 drove their cattle in on the swamp in 1864. The tule house is situated on the eastern slough.

Q—Can you start from the tule house and follow the bed of that slough down to Tulare Lake?

Defendant objects to the question as leading.

Objection overruled.

A—Yes, sir.

Q—Can you follow that slough from the Tule House up to a point on Goose Lake, the head of it?

A—Yes, sir.

1144 Q—How far can you follow the bed of that slough going south from a point west of Goose Lake?

A—To Kern Lake.

Q—To what lake?

A—Buena Vista Lake.

Q—You say that if you had plentiful rainfalls there would have been food without an overflow. Have you ever seen a season since you have been there that you would have a plentiful growth of feed along the land simply from a rainfall?

A—I said there would not be as much of it as there would be with an overflow, I think.

1145 Mr. Flournoy—Did you ever follow the slough up in the way you stated you thought you could do?

A—I think I can do it; I have never done it. I have been on all parts of it. I think I can do it.

C. W. Clarke,

A witness for plaintiff, being duly sworn, testified as follows:

To Mr. Houghton—I reside in Sacramento. I am in the cattle business; have been engaged in that business 1146 since 1851. First came to Kern County in the spring of 1865. I had property down here in 1857, but I never came down myself until 1865. I first came in February down the edge of the county near San Luis Obispo.

Q—When were you first on what is known as Buena Vista Slough?

A—Along in June, 1865, I think; it might have been in May. I was there gathering up cattle. I had cattle along Buena Vista Slough at that point. I had had cattle on Buena Vista Slough prior to that time. At that time I remained on the slough very nearly a month from the time I went on to it until I went off again. I 1147 think it was in May or June, but I am not positive about the date; it was in one of those months. I first came on the slough near Tulare Lake; and I worked all over the Slough, clear up to Tracy's Crossing.

Q—What was the condition of the water in the slough at that time?

A—Perfectly dry.

Q—You crossed the slough at that time while you were there, did you?

A—I have crossed it; well, I came right up the swag, following it right up there.

1148 Q—What do you mean by the swag?

A—Well, where the channel comes down here; a water-course. That was the best traveling at that time; it was better than on the outside; there was more alkali and soft ground, and the lizards and these little squirrels and things. The ground on the outside was kind of boggy in places. In there it was solid, and better traveling. I remained there about a month; I went to Sacramento after that. I was down there again in the fall of 1865. It was then dry. I was *rodeoing*. I suppose I was there thirty days. We did not go up as high at that time as before; we came up as far as
1149 Goose Lake and around on the east side. The slough was dry in the fall of 1865. I was the next there in 1866; down on the west side of the lake, on this slough. That was in the spring. I was there fifteen or twenty days at a time; I would go in and make a trip, and then go back. I think in all I was there about thirty days. I was then mostly down from below Goose Lake to the tule house, and all from there to Poso Creek, around to the head of the lake—on the west side of the lake. I mean north of the lake. I call that down, on account of the water running that way. I was on the west side of the lake.
1150 We had our corrals down there, and we had our work mostly on the west side, gathering up cattle mostly in here. We had our corral on the west side of the lake, in Township 29 South, Range 19 East. The tule house is on Section 32, in Township 25, Range 22 East. The tule house is on the slough, on the east side of it. I could not tell what the exact condition of the water was in the slough there at that time. We did not have a house there. There was no house about there. That house was put up in 1875, I think; I mean the tule house. In 1866 there was not much water—
1151 some water in there. I don't think there was any water running in the creek in the spring of the year when I was there. The water ran again in 1867, in the spring. I don't think I was there but once in 1866. When I was there in 1867, I worked up and down the lake there, up and down the slough, and around the head of the island to the end of the lake. I was up to the Staten Corral. Staten Corral was in T. 26, S. R. 21 E., I think, and about on Section 12 or 1. It may be 22 or 21. Our camp was there, and we worked about there, and then back. That was our camp, and that is as far as we got. That was in the

1152 spring of 1867. There was plenty of water in there then. I remained there just time enough to gather the cattle up. I was working there about 25 or 30 days. I was during that time crossing the slough from time to time. I could not tell how many; perhaps I crossed it a dozen times a day, may be. And we would go out and make a rodeo. We would see a band of cattle on the islands in places, and go in there and rodeo them, and take off our cattle and come back.

Q—How did you make those crossings around there?

A—Well, in some places we would work around and get around. The horse would swim a little, perhaps.
1153 The men understanding the channels at some places, would ride in and swim right straight across. The weather was warm. It was just as the boys would take a notion, according to how they went. I was there again in 1868, in March, I think. I went to the slough first at the lake, down about opposite where the canal is; that is, our camp. After being there I came up the Buena Vista slough. We came up the whole country. It was covered with water then. The lakes had raised clear up, and the whole country above there, and everything. The water was all over it. That was the year of the flood—spring. It was
1154 raised in the spring of 1867 and 1868. Don't think I was there again that year after that first trip. In 1869 I was there, along the spring; I think April or May, after they commenced working with the cattle. I was up and down the west side of the slough. I went up about to Staten Corral, and worked out on the plains, backward and forward. The water was high at that time. Staten Corral, I think, was not more than six or seven miles from the end of Tulare Lake. I crossed the slough at that time.

Q—Where did you make the crossing at that time?

A—Made it just the best we could to cross in places.
1155 In some places we would swim across. I was there long enough to make a round trip; from fifteen to twenty-five days; somewhere about that time. I didn't go again during the year 1869. The next time I went there, I expect, was in 1873. Between 1869 and 1873 I was not on the slough at all. In 1873 I went down there and struck the slough that ran across towards Fowler's place, on the east side, down towards Paso Creek. I don't know that that has any particular name, but I think it was called the Fowler Slough. It leaves the main slough a little north of the tule house, and

1156 then spreads quartering in a northeasterly course; from there I went on to Bull Island.

Q—I wish you would locate that island on map three; see if you can locate it on that map.

A—It is in this township, and near the county line. It is right on the county line. It is in Tulare and Kern counties, both. It is in both counties.

Q—What is it formed by? What streams ran around it?

A—I should judge this slough here (referring to map.). Here is Section 32, right here; it would be the stream there. It appears to me it comes further up. That may
1157 be correct. I don't know.

Q—That runs on the east side?

A—Yes, sir; runs off on the east side. Bull Island lies in here.

Q—What ran on the west side of it?

A—There is a slough that makes out in here; a slough that runs down in here. I don't know what they do call that slough.

Mr. FLOURNOY—The other is the one they call Fowler's Slough?

A—Yes, sir.

1158 Mr. MCALLISTER—No; Buena Vista Slough.

WITNESS—I call the whole of it Buena Vista Slough—the whole channel; that is, where they branch. They have different names. Everybody has a name of their own, as a general thing. I went on to Bull Island, and went across the water; went across the place where it was up to the sides of the horses going in there. I was in there once or twice. I was not then working there. I went back, I think, to Poso Creek. I did not remain there at all; I went right back to Visalia. The way I came to be there at that time—I had bought in with Tom Fowler, up there, and he was running the
1159 thing. I did not pay any attention to it. I was there again in 1874; I think it was June, but I am not certain; May or June. I went to gather my cattle. When I went there in 1873, there appeared to be plenty of water, and pretty good feed there. The water was running in the slough at the time. This was in the Spring of 1874, that I was there. I was there only a day or so. I went down and came right back. I did not go to the slough that year.

Q—When did you again go down after 1874?

A—After 1874? I was there in 1874.

1160 Q—I ask you this. What was the condition of the water when you were there in 1874? Oh, you didn't go on the slough?

A—I was on the slough when I was there in 1874. I crossed there, and the water in the slough was running; that is, I crossed one branch of it. I crossed the east branch, that leads out by Fowler's, in 1874. In the fall of 1874 I was down there again, and I was on the slough that time. The water was in holes then, not running—pretty well dried up; but there was plenty of tules; which was in the fall of the year. I was there quite a while. I went down and took some surveys, and we were
1161 at work running off those lines and making some arrangement about building that Tule House. I think at that time I went down to the slough. We went down and surveyed there on a line there, until we struck the township line. We did not follow it. A man named Smith, a surveyor from Tulare, was surveying some lines in from Tulare in there. I crossed the slough several times at different points north from the Tule House. I went north about six miles. I did not follow the slough, but crossed the slough several times. I kept a straight course right north of the Tule House, down the stream.
1162 We put a stake right there by the Tule House. I made a mound there, and went right west from the Tule House, about a mile and a half from the corner, and then went due north. We worked there a couple of days. I did not go south of the Tule House. That was in 1874; the latter part of it. No; that was in 1873, that I am talking about, that that survey was made.

Q—Then I understand you have already testified that you were there in the spring of 1874?

A—Yes, sir.

Q—Were you there again in 1874?

A—In 1874 I was there, but I didn't do much. I was
1163 there again in 1874, and I went down to see the boys, and I went around to look at the cattle, and went back. I did not do anything. I don't think I went to the slough. In 1875 I built a fence, when I was down there, to help run the survey from Tulare Lake to Goose Lake across to the township line, and from there over to Buena Vista Slough. That was in 1875 we ran the fence through Goose Lake up, and then due west, as far as we could go, for Buena Vista Slough, and then stopped.

Q—Will you please designate on map No. 3 where that line of fence was run?

1164 A—We started about on the county line, between Sections 6 and 5, Township 25 South, Range 23 East, and ran due south six miles to the township line. That is Township 26, Range 22 East; the northeast corner. Then we ran due south six miles until we ran through Goose Lake, and ran twelve miles to the corner of the township line on Township 27 South, Range 22 East; the southeast corner; and then we ran due west here, three miles—we may not have got quite three miles—to this tule and swamp country, and got into the water. We got into the water there, and stopped the fence at that corner. We commenced in the spring to make the survey, found
1165 the government corners, and then we went to work and built the fence. The fence was all constructed that summer, except a portion of it, which was run off afterwards. We went in the lake. As the lake receded, they followed it up. I guess I was there altogether that time, before I went home, a month, or may be longer. I did not cross the slough while I was there. The water was up high, and I had no business across it. It was full of water—all of those sloughs along there where we struck the fence. Goose Lake was full of water. We ran the fence to Goose Lake and then stopped, and did not finish
1167 it until afterwards. We completed it. The boys put posts out, so that the stock would not go around it, and after the water went down we finished it; and then, after the water went down, sometime afterwards we completed it, but I don't know exactly at what time. I went home after we got through surveying. I was there again in the fall of the year some time. I just went down to see that the work was done, and settle up with the men and get things cleared up. I did not cross the slough when I was down there then. I was down there again in 1876, in the spring; at the Tule House. The Tule House, I think, was put up in 1874 or 1875; no, in 1873 or
1167 1874. I am not right positive about the year. When I went there in 1876 I went to the Tule House. I think I stayed there over night. There appeared to be plenty of water there in the slough at that time—water running in the slough. In the spring of 1876 there was water running in the slough. There appeared to be plenty of water. I went from there back to the Poso Creek ranch, after staying at the Tule House over night.

Q—Were you about the slough after that?

A—After 1876?

1168 Q—No; after the time when you spent the night at the Tule House?

A—No. The boys were working the cattle. They were pushing up above. The Poso Creek ranch is twelve miles from the Tule House, in Township 25 South, Range 25 East. I was there again in the fall of 1876. I was down there and had the cattle moved. I had some gentle cattle about Poso Creek, and I had them moved down on the swamp. I did not go down on the slough that fall. I was not there much after that. I was down at the Poso Creek ranch pretty often, but I don't recollect of going down
1169 there. I don't think I was down there in 1877 at all. Mr. Cox attended to that part of the business. He went down and took the pumps to put in, and one thing or another. I don't think I was there at all. I have never seen the pumps. I was not there in 1878 nor 1879. I was at Poso Creek. I had pumps put in. I was not there myself; Mr. Cox attended to that. They were sent down to Mr. Lewis in 1877. They were sent to my foreman, J. M. Lewis. He is the man who was on the stand yesterday as a witness. I think we sent down about ten pumps; sent them down in order to have
1170 water. There was no water for the cattle. I got some information that satisfied me that the pumps should be there.

Q—I understand you to say that you have been, during the different times you have been down there, along Buena Vista Slough, from one end to the other, between the two lakes?

A—I have been about as far as Tracy's crossing; about three miles of what is called the dam. I have not been up to Buena Vista Lake. I have been up to the lake, but not right at the point. The dam I refer to is the Baker dam.

1171 Mr. Houghton—What is the condition of that slough from Tracy's crossing, at the point you said you had been, to the point opposite Goose Lake?

A—Well, the time I went up there, in 1865, it was very dry, and we went right up; we crossed to the water-course, and we went up to Tracy's; and the water was standing in holes there. It was full of fish—very full of fish. The water-course was then dried out, with the exception of a few low places.

Q—What was the condition of that water channel that

1172 you followed up from Goose Lake to the Tracy crossing? What was the width of it?

A—The channel was very plain.

Q—The average width?

A—The channel was very plain; no trouble about a man following it up. I could not say what the average width of it was, because it would run along—it was cut up in different shapes. I suppose in places where it was confined it was from 75 to 100 feet; in other places it would spread out 100 to 200 feet, wherever there was washouts; that is, the bed, the place where the current ran.

1173 Q—You say that you also followed that slough from below the Tule House up to Goose Lake?

A—At the time that I started there I just struck the channel. I had never been in that country before, and I had no idea of the country or a map of the country; knew the points merely where I wanted to go. We just took our horses and traveled along up. There is a place up there near the Staten Corral; there was water, and down in the slough. There were holes of good water. There was another camp up there where we could get our water. That was the only one where we

1174 could get our water for our horses until we got away above.

Q—What was the width of that slough; the average width of it from the Tule House up to Goose Lake?

A—From the Tule House up to Goose Lake is on an average of seventy-five or eighty feet I should judge.

Q—Is it well defined—that twelve miles?

A—Yes, sir; pretty well defined; good bluff, hard banks.

Q—What was the condition of that between tbe Tule House going north, ~~and Tulare Lake~~?

A—Well, along there it is a well defined slough. I

1175 had been engaged in a good many things besides stock raising; have been engaged in farming a little off and on since 1857. As a farmer I think I know what kind of a slough is good and proper to raise crops upon. I think I am a pretty good judge of land.

Q—What is the quality of this land running down this slough—from Tracy's crossing down to the Tule House?

A—Well, it varies; there is some very fine land, and then again there is a portion that is very strong of alkali. It grows salt grass and stuff, and makes good rough feed. I

1176 could give you as good an average of the whole as I could of the township, because it runs the same. The average of the land is good. I speak of the swamp land from Tracy's crossing down as far as the Tule House. The land on the east side of the Tule House, after you get along Salt Slough there, is very poor. Wherever those large tules grow, where you find big tules, there you find good land.

Q—I will divide it into two districts. There seems to be a difference. What is the quality of the land from Tracy's crossing down to Goose Lake?

A—I call that good land, more than the average. I
1177 think it is as good a body of land as there is in this country to take that amount of land together; that is, from Tracy's crossing down to Goose Lake, down to Township 27 South, Range 22 East.

Q—What percentage of that land do you think would be alkali and poor?

A—Well, it would be at a rough estimate, I think one-fourth, or might not be so much or might be a little more.

Q—Then take the land from where we left off; from Goose Lake down to the Tule House, what is the quality
1178 of that land?

A—Well, that land down there would be about the same.

Q—Do you consider that land good agricultural land, running down through there, the most of it?

A—Provided it was reclaimed and fixed so as to handle, and use the water for it, I think it would be as fine land as there is in the country. The way it is, of course, it is not.

Q—When the Spring freshets of the river come on this tract of land in an ordinary season, and the water recedes to the channel of Buena Vista Slough, what proportion
1179 of the land can be traveled over by man or beast? What proportion of this swamp land around the lake and Buena Vista Slough?

A—I should judge, ordinarily, all of it; three-quarters of it.

Q—If no water should run through Buena Vista Slough over this land for two or three years, what would be the effect of it on the land?

A—Well, it would be perfectly worthless land to purchase at all, with the exception of a wet year, or some-

1180 thing like that. Of course rain will produce as well as water and would have the same effect.

Q—You have stated that you sustained a loss of cattle there during 1877; what proportion of the cattle you had there did you lose during that year?

A—Well, I always put it more than the rest of them. Mr. Cox has always thought it was fifty per cent. I have always contended that it was two-thirds or sixty per cent. of that.

Q—What was the cause of the death of those cattle?

A—Well, it was caused by the scarcity of water and feed, there not being water on the land to make feed.

1181 Q—If the water was taken from that land for two or three years, wouldn't the land become like the desert land along the Calloway canal?

A—Yes, sir; I think more so.

Q—Are you acquainted with the country below the north end of Tulare Lake?

A—The far end; the north end?

Q—Yes.

A—Yes, sir.

Q—Before I reach that, I will ask you one thing. Do you know the name of the slough between Kern and

1182 Buena Vista Lakes, or the name that it had during early years?

A—It has always been called Kern Slough.

Q—Between the two lakes, Buena Vista and Kern.

A—I have always heard it called Kern Slough. The slough that connects the two lakes. I am acquainted with the country to the north end of Tulare Lake.

Q—Do you know the name of the slough that runs from Summit Lake to Tulare Lake?

The defendants object to the question. Objection overruled. Defendants except.

A—It is called Summit Lake Slough.

1183 Q—Do you know the name of the slough that runs north from Summit Lake?

A—Fish slough goes northwest from Summit Lake. Summit Lake lies six or seven miles north from the north end of Tulare Lake.

Q—Where does Fish Slough terminate?

A—Fish slough comes near to Fresno. From there it kind of spreads out and makes the swamp land country. Then it leads off and makes another slough, which is called Fresno Slough, where old Fresno City used to be. Some steamboats used to come up there, when I was first

1184 there, with loads of salt and different stuff. Fresno Slough empties into the San Joaquin River.

Q—At what point does the slough change its name from Fish Slough to Fresno Slough?

A—It changes its name at a point between the two sloughs. It changes it at a point about six miles northeast, where the Fish Slough kind of makes out. It is a well confined slough, and spreads out and puts off into Fresno Slough?

Q—What do you mean by making out?

A—It spreads out over more country—is not confined in the main channel so much.

1185 Q—Over what length of country does that run, where it spreads that way?

A—I should judge, from the time I was there, from observation, three or four miles.

Q—Three or four miles wide or in length?

A—The connection between the two sloughs, from the line it runs out of Fish Slough, where it is confined in the slough.

Q—How wide a country would that spread over in those five miles?

A—That all depends upon the quantity of water that 1186 is coming down. Sometimes King River comes down and spreads out—comes in and connects with Fish Slough, and spreads out four or five miles in places. Fish Slough terminates where it strikes that place, and spreads out, and after crossing that four or five miles, Fresno Slough commences. I have seen the water flowing out of Tulare Lake down into those sloughs, and down into the San Joaquin River.

Q—What amount of rainfall do you have along the land in suit during the average years—slight or heavy?

A—Very slight.

Q—How many seasons have you known that land has 1187 there been sufficient rainfall there to produce a crop on that land, or a crop of grasses?

A—We have had two years since I have known the country down thore, at the head of Tulare Lake, and that is all.

Cross-examination of

C. W. Clarke.

Mr. Haggin. Q—You say that Fish Slough connects Summit Slough with Fresno Slough?

1188 A—It don't connect. Fish Slough runs up and then spreads over what is called Summit Lake. It runs down from Fresno Slough, just above Fresno Slough, and runs up to Summit Lake. Fish Slough is a branch of Fresno Slough. Fresno Slough is a continuation of Fish Slough. Fish Slough is supplied from the waters that come out of that swamp. Fish Slough is supplied from the waters that run from Summit Lake. Summit Lake is a high point of ground there, and Tulare is low; but the waters run down from King's River. There is a kind of high swamp in there that is the lake. I have seen the water run both ways—south
1189 and north—at the same time, from the same lake. In running south, it runs into Tulare Lake. The waters of King's River run into Summit Lake, and then south into Tulare Lake; and when Summit Lake is high it also runs north, and runs down Fresno Slough. The slough from Summit Lake to Tulare Lake is called Summit Lake Slough. That is a short slough of five or six miles. (The witness points it out on map 1.) It is a little west; about three miles west of the point that would come on a line right due north of Tulare Lake. I think the lake is marked there about right, on map 1. It is between
1190 Sections 16 and 17 in Township 18 South, Range 19 East. That is about it. There is quite a swamp country there, and King's River comes down here and runs off. This does not show exactly on the map. That is quite a swampy country, and it spreads out and fills up. The water comes in here and fills this up; more water than that will carry. I have seen it, when the lake is full, running down this way, going into Fish Slough.

Q—Kings River empties into that and fills that up?

A—Yes, sir; the waters from Kings River. When Kings River runs down it spreads out over here (referring to the map). It is a very swampy country. It fills that
1191 country up, and when that country gets full this lake fills up.

Q—Now, from Summit Lake, after it has filled up Summit Lake, you say the water of Kings River flows in part southerly towards Tulare Lake?

A—At times, when Tulare Lake is low; when Tulare Lake is lower than Summit Lake. Summit Lake is higher a good deal than Tulare Lake; I suppose ten feet or more; that is at certain stages of the water. The natural bed of Summit Lake is higher than that of Tulare Lake. After the water of Kings River fills Sum-

1192 mit Lake, they flow a part north and a part south. I call this channel at the end of Summit Lake Summit Lake Slough, and the one running northerly from Summit Lake Fish Slough.

Q—Fish Slough is formed by tbe overflow of Summit Lake?

A—Summit Lake and the Swampy country. It passes over it. It is the same water. Fish Slough is carried off by Fresno Slough. The slough empties into Fresno Slough. It is the same stream and the same course—Fish and Fresno. It is a continuation. It is a mere continuation of Fish Slough, and empties into the San Joa-
1193 quin River, and flows on down the San Joaquin valley into the bay; and it spreads out and makes a part of the ocean; goes down into the tules, and near Antioch spreads out into a large river and flows into the ocean. At the time I was running surveys along a portion of the land represented on Map 3, in 1873, was along in the Summer; there was not much water there then. I am familiar with the land through that body of swamp land between Buena Vista and Tulare Lakes. There was a great deal of soil that is very black and rich soil. Then again there is a great deal of it that is poor.

1194 Q—That is soil that is formed from the decomposing of vegetable matter, isn't it?

A—Yes, sir.

Q—Entirely so?

A—You can pick it out a great deal by the growth of vegetation and alluvial deposit there. It is a heavy, thick soil. The greater part of it is down in certain portions, down north of the Tule House, and say two miles west and a mile or two east. A heavy body of land.

Q—How deep is the soil of that description?

A—We dug down two or three feet, putting in post-holes, and found a heavy soil all of the way down. I
1195 have seen wells dug deeper, and it strikes a kind of quicksand, which is underneath this soil. Wherever wells have been dug I have found the same indications of sand; once in a while a little different. Its general character is a deposit made from washing. The land is a mere surface deposit. In the two years that I have referred to, when there was a plentiful rainfall along Buena Vista Slough—one year was the Winter of 1867 and the Spring of 1868—we had a big rain that year; big feed growing all over the plains. In 1861 and 1862; but that was before I was there; that was the year of the freshet;

1196 that year the whole country was very much flooded; a regular flood.

The WITNESS—I want to rectify myself, in regard to 1866, that I spoke about. I did not say positively, but I was asked if I thought there was water, and I said I thought there was, but I was not certain. But I am certain that there was not water at the time I was there in 1866; it was perfectly dry. I know by a circumstance—we lost our wagon there, and I went into the water to quench my thirst. That was in the summer of 1866.

The COURT—Perfectly dry?

A—This swamp was all dry that summer when I was
1197 there.

To Mr. HAGGIN—I think it was in the year 1875 that I ran the fence down there, in the neighborhood of Tulare Lake and towards Goose Lake. I followed the survey for the location of the fence myself. I was there a good deal of the time when the fence was being built. When we reached Goose Lake we stopped, because it was full of water; went around Goose Lake and continued until we got to the westerly line, and then due west until we struck the margin of the swamp land. Then we found water in the swamp in these lands, spreading over the
1198 lands generally. The land was pretty well covered with water.

Q—You mentioned again that at some time you followed what is termed Buena Vista Slough from the vicinity of the Tule House out southward to about the Tracy crossing, which you described as being within a couple of miles—two or three miles—of the old Baker dam?

A—Yes, sir. The fish that we found in the holes at the upper end of the slough were alive. We did not at that time find a great many dead fish lying around there. There were hogs around there that ate them up. I don't
1199 think there were any dead fish around. That was in 1865.

Q—Did you find that channel all of the way, or did you go out?

A—I struck straight across, and whenever the channel missed we would cross right along. We kept up through there; it was better traveling; crossing in and out all of the time.

Q—Traveling some of the time on the land outside of those swamp lands or Government lands?

A—Outside of the land was not good traveling, and

1200 we generally kept on that, because it was a straight shoot, straight across. In fact, it was a good guide to go by, to know where I was going. That way across I could follow it right up.

Q—You mentioned that there are some places where there is more alkali in these lands than others. The land described is the body of swamp land. This alkali forms itself into deposits where you can see it here and there?

A—Yes, sir. The ground will be perfectly naked in places for acres; perfectly naked and white with alkali; perfectly worthless.

Q—These spots are scattered around there, here and
1201 there, through this tract of land?

A—Yes, sir, in some places. That land there is in some places solid black land—good land; and then, again, you will strike those spotted places. You are liable to find them anywhere on the borders, more so than in the tules. Wherever big tules grow, alkali is not there.

Q—You found more or less of these spots throughout the whole extent of that tract of land, as I understand you?

A—Yes, sir; anywhere on the borders. I think you find it most anywhere.

1202

W. Canfield,

A witness for plaintiffs, being duly sworn, testified as follows:

I reside in Canfield, Kern county; that is about twelve miles west of Bakersfield, a little south of west. It is on Section 34, Township 30, Range 26. I have resided at that point since the year 1874; I have resided in Kern County about ten years; continuously about eleven years. Previous to 1874 I resided on the north side of New River, a part of the time I might say in the neigh-
1203 borhood of Buena Vista Slough. I cannot say definitely. A portion of the time, I might say, I was two or three miles from the lower end of New River; for a portion of the time I was at another place, perhaps five or six miles; I was located on the north side of New River. I am now on the south side. I first came to this country in 1864; I came to see about some property interests that I had—cattle. I came to a point on Buena Vista Slough, about thirty miles north of Buena Vista Lake; after striking the slough we camped there for a while; Mr. Tracy and I had a camp there; I camped there for three

1204 or four months perhaps, but I don't recollect exactly how long. During that time I was going up and down the slough for a distance of, I suppose, about forty miles, pretty nearly all of the distance between the lakes. When we left tbere we moved up the slough to a point perhaps three or four miles below Buena Vista Lake—from the north end of Buena Vista Lake. We stopped there I think for three years; I won't be certain about the length of time, three or four years I think. When we reached that point we crossed Buena Vista Slough. There was water running in it to the northward. That was in the Summer of 1864.

1205 Q—What was the condition of the water in Buena Vista Slough when you were following along it nearly the whole distance?

A—Well, it was standing in holes at different points, and there was water running during the Spring of 1864, but during the Summer it was pretty nearly all dried up for a long distance above. We crossed the slough at the old Tracy crossing. I think I remaind there at that time two months, at the old Tracey crossing. Then I went to Stockton. I came back again to Buena Vista Slough in 1866. It

1206 was in the Spring; I don't recollect what month. I remained there that time probably a month. I was on the east slough that time; at the Tracy crossing. I was at work with the cattle, up and down the slough. I was down as far as Goose Lake. There was a good deal of water in the slough, in the early part of 1866, when I was there. The water was running in Goose Lake Slough in 1866.

Q—Well, I ask about Beuna Vista Slough?

A—That, I don't recollect about Buena Vista Slough, I think it was running; I am not certain; I cannot answer that question. I remember a dam that was put across

1207 Buena Vista Slough. That dam was put across there by Col. Baker. I cannot state what year. I cannot tell how long the dam remained unbroken there. I first went there in 1864, but I went back in 1866. I don't recollect anything about the dam in 1866; I could not state positively in regard to it. I do not know whether it was broken before I got back there, in 1866, or not. I was going up and down the slough the month I was there in 1866; crossing it from time to time. I went there again in 1867; it was, I think, in the month of March, and I went to the same place. I suppose I re-

1208 mained there a month and a half perhaps. I was working on the slough at that time; along the slough to some extent. There was a good deal of water running in the slough in 1867. I was crossing the slough from time to time.

Q—How would you make these crossings when you went across the slough in those years?

A—I made them in a boat. We crossed near the old Tracy crossing; what is called the Tracy crossing. I don't think I crossed the slough at any other points. I was there again in 1869, in the fall of the year. A good deal of water in the slough at that time. It was
1209 running; running to the northward. I don't think I crossed the slough at that time. I came to this country to reside permanently in 1870.

Q—At the time you came here in 1870, to reside permanently, where was the main channel of Kern River running, after it left the bluffs here, north of Bakersfield?

A—The main channel was what we now consider New River.

Q—Well, has there been any change, or material change, in that channel since that time?

A—Not very material, I think.

1210 Q—Have you had occasion, when you were residing at those points—in coming to Bakersfield, did you have to cross that river?

A—Yes, sir. Perhaps during the three or four years I have resided at the point on the north side of the river, I crossed, perhaps, every month or so. Sometimes we would make a crossing at Tracy's crossing, and sometimes the water was very high, and we would come up very nearly opposite Bakersfield. I mean the New Tracy crossing on New River. That is undoubtedly the place (pointing to crossing as indicated on map 4,) on Section 24, Township 30, Range 25

1211 Q—Mr. Canfield, during the time you were residing at those points, and crossing, you say, nearly every month, at Tracy's crossing, or above, did I understand you to say?

A—Yes, sir.

Q—Did you ever cross that river there when there was not water running in it during the years 1870, '71 '72, '73 and '74?

A—Yes, sir. I crossed it a great many times when there was no water in Tracy's crossing prior to 1874.

Q—Did you ever cross that river during the year

1212 1870, coming to the town of Bakersfield, when there was not water running in it?

A—I think not in 1870.

Q—Did you in 1871?

A—Yes, sir.

Q—That dry year?

A—Yes, sir. I think I did in 1872. I think it stopped running there for perhaps two months.

Q—Did you during 1873 cross that river at that point at all when there was no water flowing there at all?

A. I think I did. I went down to where I now reside
1213 in 1874.

Q—What was the condition of Kern and Buena Vista lakes prior to 1876, dur ng the spring season, when the water was running down?

A—A portion of the time I have known the water flowing out of the lake into the slough, to the northward, and a portion of the time I have known the water flowing—a part of the water, at any rate—from Kern River, flowing to the southward into that lake, from this New River; and during that portion of the time it must have been low.

Q—Was there ever a year that you know of, prior to
1214 1876, that at some time the water was not flowing out of those lakes and to the northward?

A—Yes, sir; it didn't flow out in the year 1872.

Q—No water flowing out of the lakes in the year 1872—out of Kern and Buena Vista Lakes?

A—No water, I think.

Q—During the whole year?

A—Well, I don't know that I could say certainly that during the whole year it did not flow out. I know that in the summer season, when the Kern River was low, it was flowing both ways, a part of the time into the lake
1215 to the southward, and a part of the time into the swamp to the northward; and my opinion is, upon that, it was during the whole of the year so low that it would not flow out to the northward from t e lake.

Q—Were you on Buena Vista Slough during 187z?

A—Yes, sir.

Cross-examination of

W. Canfield.

To Mr. Haggin—The water was running down through

1216 Goose Lake Slough in 1866; the water of Kern River was running through Goose Lake Slough. It came from Kern River; I can tell from pretty nearly where. The source of Goose Lake Slough is near the head of the Pioneer ditch upon Kern River. It comes out on about Section 36, Township 29, Range 27. There was a good deal of water running down there in 1866.

Q—What was the course of Kern River, from just north of Bakersfield, during the year 1866, and from that time on, or what change occurred in it?

A—During the wet season, the Winter of 1867, the
1217 channel of New River broke through, or the water seemed to take that channel, the present channel of New River. In 1866 some water ran through Goose Lake Slough. Quite a quantity of water ran through Goose Lake Slough. The balance of it ran through what is considered Old River now.

Q—Then in 1866 the course of the river was through Old River, which empties into that connecting channel between Kern and Buena Vista Lakes, was it not?

A—Yes, sir; and the balance of the water ran through Goose Lake Slough to Goose Lake?

Q—That continued through 1866?

1218 A—No, sir; I think Goose Lake Slough dried up. While the water ran that was its course. In 1867 water ran through Goose Lake Slough. I don't recollect as to 1868; in fact, I was not here in 1868.

Q—This is in the year 1866? That was the channel of all the water that passed beyond the mouth of Old River. In 1867, you say, a portion of the water of Kern River ran down and formed New River?

A—Yes, sir; in the Winter of 1867 and 1868, the Winter of the flood.

Q—Where did the water of this New River run to?

A—I know where a part of it ran, but I cannot say I
1219 knew where all of it did. The water at the mouth of the river, what we considered the mouth of the river, ran at that time—a part of it went down Buena Vista Swamp. I was on that side of it. There was an unusual amount of water down there in 1867, I should say.

Re-direct Examination of

W. Canfield.

It must have been in February or March, 1866, that this water ran down Goose Lake Slough. I don't know

1220 how long it continued. I was not in the country for a long time. I don't know how long it did continue to run. I was here when it did run and crossed it. It was running during a short time. I was here in 1866, and I crossed it several times. That was in the spring. I was probably here a month or two. I think it was running all of that time. I was here only once during that year. I don't remember whether it was running in that slough when the Baker dam was in or not. I was here at the time of the flood in 1867 and 1868, and the water was that year running in Goose Lake Slough, and I crossed it
1221 at that time. I don't know that I can say how long it continued to run after that through that channel. I don't recollect. It ran a long time. I have not seen the water running in that slough from Kern River since the flood of 1868.

To Mr. HAGGIN—I don't remember the year that Baker dam was built. I saw it when it was intact; but I cannot state definitely the year. I don't believe I saw it before it was broken at all.

PHILO D. JEWETT,

1222 A witness for plaintiffs, being duly sworn, testified as follows:

I never was at Buena Vista Slough, except at the head of it, at Col. Baker's dam. That was in the spring of 1865. Col. Baker was building it at the time. I was never on the slough before that time. I was there again in July, 1866, at the Baker dam. There was water running over the Baker dam at that time. I have not been there since then. I came to to this country in September, 1861. Where I first struck the river was about 12 miles above here, up the
1223 river. I remained there until November. 1874. I did not see the river below Bakersfield until after the flood of 1862. I traveled along near the South Fork prior to that time, but not near enough to notice it, one night. It ran in a southerly direction, in the old South Fork channel, from the bluffs down towards Kern Lake. I went within a few rods of it, but I did not notice the river. I did not notice how wide or how deep it was at that time.

Q—What was the condition of the country along that South Fork channel at that time?

A—It was covered with tules when we got down

1224 about six miles below here. I do not know how far that continued. I suppose it continued to Kern Lake.

Q—What is the condition of that land now?

A—Dry.

Q—What has made the change in it?

A—I suppose because the ground is dry.

Q—What makes the ground dry?

A—Because the water does not run in the South Fork. I presume. I am engaged in farming and stock raising. In connection with farming I have used water on my lands in this country since 1874. I understand the advantages of water to land, and the necessities of
1225 land for water.

Mr. Garber. Q—You say you understand the advantages and necessities of water to land here. Is it a necessity to the land here—water?

A—It is according to whether the land is naturally damp or dry.

Q—It depends upon the situation of the land?

A—The quality of the land. Some land here don't need any water.

Q—What land is that? What portion of the lands in this county?

A—The dry land.

1226 Q—What portion of the land in this county is it that don't need any water?

A—What proportion?

Q—What portion of the land is there in this county, which don't need any water; to which water is not a necessity?

A—There are some portions of the land so damp that they don't require much water, probably not any. I have some land that don't require irrigating. It is about one mile north of this town.

Q—What makes it damp?

1227 A—Being surrounded by ditches, I suppose.

Q—Was there water turned artificially upon it?

A—Around it and near it, and the rise of the water in the river. It is so near the river that it don't need any irrigation.

Q—Well, that is the natural course of the river?

A—Yes, sir. I think it is irrigated by the river, and by ditches also, so that it always has water on it.

Q—Whenever that condition of affairs does not exist, whenever there is not by an artificial or natural channel a stream of water running down by the land, water is a necessity to it, you say?

1228 A—Yes, sir. I know if the water was turned out of the ditches it would dry my land up. But I don't know from my own experience, because it has never been turned out. I was down at Baker's dam in July, 1865, when it was being constructed. I was there when it went away in 1866. It was on the 2d day of July. It was carried away so that I could not cross stock that day. Going across with sheep, I could not cross with my stock.

Cross-examination of

1229

PHILO. D. JEWETT.

I think it was March, 1865, I was down there with Col. Baker when he was building that dam. That is on the outlet of Buena Vista Lake; I should think it was 2 or 3 miles from the lake as near as I remember. Col. Baker was building and Mr. Stine was helping him. I was not interested in it at all. He said he was building it to hold the waters of the lake back—Buena Vista Lake and Kern Lake. I don't know whether he said what for; but everybody knew what it was for. I don't know that he told me directly what he was doing

1230 it for.

Q—What conversation was between you and him about it at the time?

A—I cannot recollect.

Q—Did you ever have any conversation with Col. Thos. Baker about the purposes of building this dam prior to 1867? Did you have any conversation with Col. Baker as to the purpose for which he was building this dam?

Plaintiffs object to the question on the ground that it is irrelevant, immaterial and hearsay. Objection

1231 overruled and exception taken.

THE WITNESS. I have heard him say that on the completion of his reclamation works he was to secure a large quantity of land. I never heard him say directly what he was building the dam for. I was there afterwards, in 1866, and the water was running over the dam; not over the top; there was a waste gate. The dam had washed away. I went over on the 1st of July. When I came there that night, and the next day it was washed away, so that if I had not come over the night before, I could not have crossed my sheep. I crossed right on the top of the dam; the dam made a road.

1232 Q—Was the water running right through the dam in 1866, when you were there, or had it broken the dam through?

A—I am not certain, I think that the headgate broke away, and the next day it was running clear through the dam. It had washed a portion of the dam away, and the water was running down the stream. There was quite a large body of water flowing over the dam. I could not say how much; quite a sheet of water. It was constructed in the spring of 1865, and went off in July of 1866. While there, it backed the water up into the lakes; Buena Vista Lake, at least,

1233 Mr. Houghton. Q—You say that backed the water, or that the water backed up?

A—Yes, sir.

Q—Into Kern and Buena Vista Lakes; what water?

A—The water that ran into the lakes.

Q—From what source?

A—From Kern River.

George Racine,

A witness for the Plaintiff, being duly sworn, testified as follows:

1234 To Mr. Houghton. I am stockraising. I have been engaged in that business about 22 years.

Q—When did you first come to what is known as Buena Vista Slough?

A—In 1859, I struck a slough then at the Staten Corral; I remained there only one night; and I went then down to Tulare Lake, and went back to Tulare County.

Q—What was the condition of Buena Vista Slough when you struck it in 1859?

A—There was water flowing there, flowing north. I

1235 went to Buena Vista Slough again in 1863. That year I struck the slough at Staten Corral. I drove cattle through. I remained there about a week, and I then went back to Tulare Lake. At that time I might have been 8 or 10 miles below. I don't remember exactly where. I was there about a week.

Q—Were you ranging your cattle along the slough?

A—Yes, sir.

Q—Did you cross the slough at all during that time?

A—Yes, sir.

Q—What was the condition of the slough at that time?

1236 A—There was a little water there.

Q—Was it running in places?

A—Yes, sir. That was in the spring; I think it was in April; I could not say how deep the water was; it was not swimming; the banks in places, I guess, might be swimming deep, but we found places that we could cross without swimming, and did not try it. I came to Buena Vista Slough again after 1863, in 1864, along about the same time in the year. I struck the slough then in Tulare Lake, and then I went up as far as Staten Corral again. I did not go any further up. I think I was there over night. I saw the slough at the
1237 time. The water was standing in holes. That was in the year 1864. I next went to the slough in 1865, in the spring of the year. I struck the slough at that time at Tulare Lake, and went right on up the slough as far as Tracy's Crossing, the old crossing on the slough. I have been around through there. I don't remember exactly; we were hunting cattle, and prospecting the country; hunting up cattle. I was going up the slough at that time and crossed the slough. I do not know, I could not tell how many times; too numerous to mention; I could not say.

1238 Q—At how many different points did you cross the slough after going up there?

A—Well, I could not tell that; but a good many though.

Q—What was the condition of the water in the slough at that time?

A—There was no water; that was in 1865. After going to Tracy's crossing I went back the same way. I might have been seven or eight days making the trip back. I was crossing the slough also at that time, backwards and forwards. I was next on the slough in 1867. I was not there in 1866. I could not state
1239 where I struck the slough. In 1867, between Staten Corral and Tulare Lake. Then we worked right on up the slough, to Tracy's crossing. I crossed at Tracy's crossing.

Q—What was the condition of the water at that time in 1867?

A—Swimming. I could not say how long I was going from Staten Corral up to Tracy's crossing. We were hunting after cattle, and gathering cattle—rodeoing. I might have been there a month. I don't know but we were a month on the sloughs.

Q—During that trip did you cross the slough at all?

1240 A—I crossed the slough then at Tracy's crossing. We did not go any further. After crossing at Tracy's crossing I went back again, back along the slough. I didn't cross the slough on my way back.

Q—What was the condition of the water in the slough at that time?

A—Plenty of water, running north. I went to the slough again in 1868, about the same time, in the spring. I think March or April, or somewhere along there. I struck the slough then at about the same place. I was gathering cattle. I think I went that time as far up—you have not got it on that map—I was
1241 at Dovers' hog camp a part of the time. I did not go to Tracy's crossing that year. The water that year was very high.

Q—That was the year of the flood?

A—Yes, sir. I may have remained there a month or two. I don't recollect exactly, it is so long ago. I next went to Buena Vista Slough in 1869, at about the same time of the year. I struck the slough at the same place, about the same place. And then I continued on up along the slough, in about the same country. I did not go to Tracy's crossing. There was plenty of water in the slough at that time. I crossed that slough that
1242 year, and where I crossed it, it was swimming. I was there again in 1870. I think I struck it in the same place. We had a regular road to go backwards and forwards, along that slough. I don't recollect how far up the slough I did go in 1870. I crossed the slough. There was not as much water in 1870 as there was in 1869; but there was plenty of water.

Q—In crossing the slough in 1870, would you have to swim?

A—In places. I was there again in 1871, at the same place. The water was low.

Q—Was it running at all in 1871?

1243 A—I don't think it was. I did not get there until late in the season; July, I think. I might have been there a week or two weeks; I don't know exactly. I think I was between Tulare Lake and the Staten Corral.

Q—Were you crossing the slough at that time?

A—Yes, sir; I think I was there again in 1872, and along the same country, and on the same business. I was crossing the slough. There was some water.

Q—Did you have to swim in crossing in 1872?

A—In places; we had to swim down next to Tulare

1244 Lake, at what is called Mud Slough, at about Fowler Island.

Q—Would you always, in crossing the slough that year, find some point where you would have to swim?

A—Yes sir; we found points we would have to swim. I was there again in 1873, on the same business. I crossed the slough at that time. I was further up the slough that year. I came up to the Consuelo Ranch. I think that is about eight miles below Bakersfield, between Kern Lake and Buena Vista Lake. I might have been four or five days coming up from Tulare Lake. I was coming along the slough. I crossed it
1245 down there, at what is called Bull Island, but I came up on the east side.

Q—What kind of a crossing did you have where you crossed it?

A—By swimming. That was in 1873. I just came up to the Consuelo Ranch and camped there. I think we had a camp, and turned round and went back the same way, down the east side. I crossed it on this side, where we crossed before.

Q—What kind of a crossing did you find?

A—Sloughs; swimming. I think that I was there
1246 again in 1874, in the same business. I struck the slough that year about the Tule House.

Q—Did you follow up the Tule House that year?

A—Well, that year; no. I am coming from a different point. I come in from the east side in 1874. I followed up the slough on the east side. I went up to Tracy's crossing. I crossed there, and there was plenty of water. It was running, running north. After crossing there I went down the west side, and along the slough. I don't know how long we were going. It might have been a week or 8 days or 10 days. I was there camping along the slough. I was not crossing
1247 until we got down to the lower end. I crossed at the lower end. I found a bad crossing there and had to swim. I was there again in 1875 on the same business. I struck it then on the east side of the Tule House. Then I went up the slough; I think I came up as far as Weed Island and crossed there.

Q—What kind of a crossing did you find at the time?

A—Very bad, swimming. I think I found two; may be two channels there if I recollect right, I think there is an east channel and a west channel, and a channel that goes right through Weed Island a part of

1248 the way. We went on the island and came back. Did not remain there any length of time, just to rodeo cattle and to bring them out. That was in 1875. I went back then; went back on the east side. I went there again in 1876. I think I struck the slough somewhere about the Tule House.

Q—How far did you go along that year?

A—That year I struck it at Goose Lake in 1876. Then I went south along the slough. I think I went up opposite Weed Island. From there I went back across what is called Jerry's Camp on Button Willow Slough. I did not myself go on the island that
1249 year, or into the slough. I think that is the only time I was there in 1876. The next time I was there in 1877, the next year. I struck it that year at Tracy's Crossing and went on down as far as the adobe holes. The adobe holes are on the west side. Then I came back to Tracy's Crossing again and went to Bakersfield.

Q—What was the condition of the water at that time in 1877?

A—There was some water here at Tracy's Crossing. Below there was not any.

Q—Who did you find at the adobe holes, if any one?

1250 A—I found Mr. Briggs there. He was rodeoing cattle. I found a good many there. They were camped there at the adobe holes.

Q—Did they have any pumps there?

A—Yes; one at the adobe holes.

Q—Were there any other pumps in that vicinity that you see?

A—Yes, sir; there must have been 8 or 10 that season. They were for pumping water for the cattle. The cattle were very poor.

Q—Were any of them dying?

1251 A—Yes.

Q—Do you know what proportion of the cattle died along Buena Vista Slough that year?

A—Well, I should think, about 40 per cent.

Q—What was the cause of their death?

A—Want of water and feed.

Q—Did you go there again during the year 1877?

A—Sir?

Q—Did you go more than once during the year 1877?

A—Yes, sir; I went there in July and worked there until October, I think. I was then driving cattle to feed. I think the pumps ran there from June. I went

1252 down there myself in June, but not to gather cattle. I went down there first to put in pumps, in June. I did not put in any. I was taken sick. I went down in July and commenced driving cattle, and I was there until October, I think. The pumps were running all the time I was there. I went there again in 1879, in July. I was not there in 1878. I was there just about a week in July, 1879. I went to the Tule House. I was gathering cattle. I was not there again in 1879, after that.

Q—What was the condition of the water in July, 1879, when you were there?

1253 A—It was standing in holes and places, and they were running some pumps.

Mr. McAllister. Q—The slough was not full then?

A—No.

Mr. Houghton—You remained there a week?

A—Mr. Lewis, I think, was running the pump.

Q—Who for? do you know?

A—Mr. Cox and Clarke, I heard.

Q—Was there any water running in the slough at that time?

A—Not that I saw in that section of the country. I was not there after that in 1879. I went there again

1254 in 1880. I think it was in April; I remained about a month gathering cattle. I went from there to Tulare Lake.

Q—Were you crossing the slough during that year?

A—Yes, sir; I could not state at how many points we did cross it. Below the Tule House there was no water. We crossed it down there. The water had not got down yet. The water was coming down in the sloughs, but had not got down that far. I think that was in April. In May I think I was there also.

Q—You found water above, further up?

1255 A—Yes, I don't think I crossed the slough in 1880 in that section of the country, that is clear across. I crossed it onto the islands.

Q—In crossing it onto the islands how do you put the water in the sloughs, in crossing to the islands?

A—I could not say.

Q—Did you have to swim?

A—Yes, sir. I went onto Broder Island, and I think I went in onto Weed Island. I could not say from which side I crossed to get to those Islands. I went in there about two or three times, may be. I could not say. I do not recollect. I know we went in there.

1256 Q—Did you go there again after that, in last year?
A—No, sir.
Q—Have you been there since?
A—Oh, yes! I was back there in 1880.
Q—When?
A—In the fall. I just went down and right back. I was not there but a few days, down the west side.
Q—Did you have cattle at that time?
A—I had cattle, yes.
Q—Did you cross the slough there?
A—No, sir.
Q—Have you been there this year?
1257 A—Yes, sir.
Q—When?
A—In January, and remained about 10 days. The water was only standing in holes in the sloughs.
Q—No running water?
A—No; I was about 10 miles below Dover's hog camp. I was over there and down to Tulare Lake. I could not say at how many different points I have crossed the slough running through that swamp land during the time that I have been on it.
Q—Do you suppose you were on every section of land that it runs through?
1258 A—Very nearly it, I think.
Q—What kind of a channel is it that runs down through that body of swamp and overflowed land from Buena Vista Lake to Tulare Lake?
A—It is a well defined channel.
Q—How deep upon an average?
A—I could not say how deep; in places where there are steep banks, such as there is from Buena Vista Lake down to Norton's camp or at the Wible camp, some places there it would be eight or ten feet deep, the banks, and in some places less. Some places below
1259 before we got to Weed Island, was very steep banks, eight or ten feet high. Then you came to the banks that are sloping banks, and the water would not be over five or six feet. In some places it would be fifteen or twenty feet deep. It runs on in that way clear through.
Q—What kind of a channel is it that runs through from Goose Lake to Tulare Lake?
A—From Goose Lake?
Q—From Goose Lake to Tulare Lake take the east channel? You can look at this map.
A—Well, there is no such thing as a slough to Tulare Lake.

1260 Q—I mean from opposite Goose Lake.

A—Opposite?

Q—How many channels are there from Goose Lake, opposite Goose Lake to Tulare Lake?

A—How many channels?

Q—Yes.

A—I think there is two.

Q—Well, now take the east channel; what is the average depth of that channel through to Tulare Lake?

A—Oh! From 3 to 10 feet; there are places in it 15 feet. It is from 80 to 100 feet wide.

Q—What is the condition of the depth and width of
1261 the west channel, as to being larger or smaller?

A—The west channel, parts of it are larger. It averages the same about, I think.

JESSE DOVER,

a witness for plaintiffs, being duly sworn, testified:

To Mr. HOUGHTON. I live on the swamp on Buena Vista Slough. I cannot locate it on the map, but I guess you all know where Dover's hog-camp is without my showing it to you on the map. It is about 15 or 16 miles from Wible's camp, and about on Sec. 1, T. 29,
1262 R. 22, [indicating place on map]. I went there in 1876. I think it was in July. I went there to raise hogs, and I am there when I am at home. I have been in the hog business ever since. I ran my hogs around over the country there on Buena Vista Vista Slough, between the adobe holes and Weed Island. I have been there with my hogs ever since. I went there taking care of them myself.

Q—In going through that other body of swamp land, have you become acquainted with the sloughs or channels that run through that land.

A—Yes, sir, I have, for a distance of 15 or 20 miles
1263 both ways, north and south, from my camp.

Q—How far have you worked your hogs north?

A—Well, they ran to the adobe holes, about 14 miles, some of them. On this side I had some hogs

Q—How far do they run south?

A—Seven or eight miles.

Q—What is the condition of the channel running through that swamp land, between the point that you have spoken of and the point where you keep your hogs?

A—Well, there is some places a big, fine slough, and at other places it is not very deep.

1264 Q—How many sloughs are there running through between those points?

A—Well, there are places where you can cross the swamp, and you cannot find but one slough, and there are other places where you will find three.

Q—What is the average size of the main slough that runs through there, between the points 15 miles below your camp—the adobe holes, I should say, and the 7 or 8 miles, above where you ran?

A—Well, I don't know what it would average. I think it would average between 60 and 80 feet.

Q—How deep would it average?

1265 A—Well, it would average between 3 and 10 feet deep, I guess—some places 3 feet deep; other places, about 10.

Q—In running through there, have you been upon every section of land along that country, two or three miles?

A—I would not say positively. I am in that swamp every day that I am at home, and if there is a spot there that I have not been on, I don't know it.

Q—When water is turned in and allowed to run down Buena Vista Slough, will it course along that channel that you have spoken of before it will over-
1266 flow the main body of land?

A—Not altogether; there is places that it will overflow the banks before it will go through. There is low banks, a wide slough, that there ain't any perpendicular banks and it will back out, but no great distance.

Q—What width will it be before it would go through in that channel?

A—Well, there are places where it might back around 300 yards before it would go through.

Q—Then if you turn water into that channel, so as to make it a continuous stream down it, how wide would it be at the widest point to have the water con-
1267 tinue running through.

A—I could not tell you how that would be. I went down there in 1876. There was plenty of water then. That was in July, that I went there and there was plenty of water then. The water was running in the slough. I forded it with a team. There is a shallow place between where the bridge is and the Tracy crossing, coming down from the Alejandro place, you can find the shallow places in the slough that comes out of Buena Vista Lake, coming out of Buena Vista Lake there is a shallow place there, and the water was there up to the wagon

1268 bed, and I think it was about 150 feet wide. That was in 1876. There was no water in the slough in 1877. I was there in 1877. There was some water standing in the slough.

Q—Do you know of any reason there was no water in the slough in 1877?

A—Because it did not come through I suppose. I did not know why it did not come through.

Q—What effect did the failure of water there in 1877, have upon the feed along that slough?

A—Well, it had considerable effect. The cattle died there that year. I could not tell you how many.

1269 Q—What proportion of cattle on that slough died that year?

A— I should judge there was about half died, that was in the swamp. I don't know, I saw them dying there, and pulled them out at all seasons whenever I could.

Q—What was the cause of the death of those cattle there?

A—Want of water and feed, I suppose.

Q—What was the condition of water there in 1879?

A—Very little. The water came down as far about, I think, as 3 miles this side of Wible's

1270 camp, and ran a few days below Wible's camp to Weed Island, 3 miles north of Wible's camp. There were 10 or 12 pumps running there. Cox and Clarke and Crocker were running the pumps. There were pumps run there in 1879 by the same firm.

No cross-examination.

Testimony of

J. Pensinger,

1271 Called for plaintiffs, being duly sworn testified:

To Mr. Houghton. I reside in Kern County, about 14 miles southwest of Bakersfield. I reside on Sec. 8, T. 30, R. 26, close to the river, and about a quarter of a mile from Kern River, what is known as New River. I have resided there ever since 1873.

Q—Has the channel of New River been in the same place where it passes your house since 1873?

A—Yes, sir. I have been on Buena Vista Slough; first in 1872 I crossed there, living at Santa Barbara. I crossed in a wagon—forded. I was there again the

1272 same year and crossed; crossed it that time in a wagon. I saw a ferry-boat there. I don't know whether it was a ferry-boat or not. That was in December of the same year, 1872. I could not tell you how large it was; it was 16 or 18 feet long and 6 or 8 feet wide. It was a kind of a scow. I found it sunk there in the slough. I hauled it out of the slough with my mules and then cleaned it and caulked it, and then I started down the slough.

Q—How far down the slough did you get with the boat?

A—Well, I don't know exactly; 5 or 6 or may be 8
1273 miles. I started from between Tracy's Crossing and camp; that was in December, 1872.

Q—After going down 6 or 8 miles what did you do then?

A—I tied the boat up and left it there.

Q—Why didn't you take it back?

A—The current was so strong I could not tow it back. I went no further down the slough at that time. I have been below that point on the slough in 1874. I don't know how far down exactly; it was at the mouth of the Button Willow Slough, I suppose that is called Goose Lake Slough. That is the same slough. I don't
1274 know; Button Willow Slough, I think, is 20 or 30 miles below Tracy's Crossing. It was very nearly 20 miles. I could not say how far it is. There was a lot of islands down there. I was hunting wild hogs down there. I was in there at different times, about 3 or 4 days each time. When I was hunting hogs along there I went several miles along the slough.

Q—What was the condition of that water at the time in the slough?

A—Well, the first time the water was high, that was in July, 1874, June or July, I think it was in July. I
1275 was on the east side of the slough. I went in on the islands there.

Q—How did you make the crossings that you speak of?

A—Swam them. It was 60 or 80 feet wide, I suppose. I could not say how many times we crossed through to the islands. We crossed frequently. I was there last in November or December, 1874. The water was lower there at that time. It was mostly confined to the sloughs, and we had to swim them. The water was running when we went there both times north. I have been on Buena Vista Slough frequently

1276 since. I have been on it and across it frequently. I have crossed it several times at Weed Island. I could not tell the year, but since 1874, and I have been along the slough, up above Tracy's Crossing, along there, and above the old dam. I have been there several times.

Cross-examination of

J. PENSINGER.

I have crossed the slough frequently since 1874. I think I have crossed it every year from 1875 to 1880.

1277 Q—How did you find the water there in 1875 when you crossed?

A—Well, I could not say for date about the water. At times I have found the water there, and other times they were dry. I was there at different times in the year 1875, and crossed it in different times of the year. I could not say how often I crossed it in 1875. I could not tell whether it was dry at any time in 1875. When I crossed there, I was on road matters, and I was not paying any attention. In 1875 I crossed in several places. I have crossed along where Wible's Camp is, and I have crossed at Weed Island, and I have crossed

1278 higher up. I don't know where I crossed in 1875. I was collecting road taxes, and working the road. That was my business at the time. I was either in a wagon or on horseback; I don't remember which. I cannot remember the date when there was water there and when it was dry.

Q—Since 1874 was it oftener dry or oftener full when you crossed there?

A—Well, there was more water in 1874 than I ever saw since.

Q—You have oftener found it dry than found water

1279 running since 1874?

A—Yes, sir.

Q—Have you ever been down to the mouth of New River?

A—Well, I don't know; I have been all along. I have been past the mouth of it. I have been along on the opposite side from the mouth, but have never been on this side. I have crossed the bridge at Cole's crossing.

Q—In crossing there, would you cross quite close by where New River comes down?

A—I followed one branch of it down a part of the

1280 way. That was the southern branch. I followed it down several times in the year they commenced the Goose Lake Canal. It was that year. I mean the canal that starts out of Wible's Camp; that big canal. I don't remember what year that was started; that I followed the south branch of New River down. I had a team at work there, working on the canal I was working under Mr. Wible. I don't know who Mr. Wible was working for; I did not hear him say. It was that year I followed the South Fork of New River down to where they were working and where the river entered into the slough.

1281 Q—Did you ever follow any other except that South Fork?

A—I have crossed them all.

Q—Where; close down by the slough?

A—Well, yes, sir; I crossed them when I moved near the mouth, the first time when I crossed. I crossed them all when I moved through there. That was in 1872.

Q—Where did the water of that river run to?

A—Well, I have seen it running south and I have seen it running north. I saw it running south, I think, in 1874, into Buena Vista Lake.

1282 Q.—Was it all running into Buena Vista Lake then?

A—I could not say that. It was all running in, that was running by there.

Q—All that you saw was running into the lake?

A—Yes, sir.

Q—Where is it; what work were you doing at the time you say you were working there?

A—Building that levee at Cole's. That is a part of the work I did for Mr. Wible. I could not tell the year it was. I was scraping there. I was near there occasionally. I was not working there myself; I had my team there. I did not see them when they com-
1283 menced; they had already commenced. There was not much done when I got there. They had commenced the scraping on this levee.

Q—Was the water running through where the levee was built into Buena Vista Lake at that time?

A—I could tell you; there was water in the slough. It was in the night when I was there. I could not tell you whether there was water in the slough. I was not there the next day. I was there afterwards, but I was not across the slough. I had a team working there. I was not with the team.

1284 Q—You don't know anything about the work that was done there?

A—Well, all that I know about the work is being there hauling with my team. I was there twice, and they were scraping dirt on the levee.

Q—Was the water running through into Buena Vista Lake then?

A—I could not say.

Q—You did not notice?

A—No, sir.

1285 Testimony of

M. Rogers,

A witness for the Plaintiff, being duly sworn, testified:

To Mr. Houghton. I reside in Kern County, in the mountains, towards Linn Valley, at present, 25 miles from here. I first came to what is now called Kern County in 1858.

Q—When did you first visit what is known as Buena Vista Slough?

A—In 1858, I came from a hunting trip along the
1286 slough. I came there in September. I first struck the slough 8 miles above Tulare Lake, this way, and south of Tulare Lake. Then we came up the slough probably ten or twelve miles. Then I went from there to the Templor ranch, in the mountains. I just camped on the slough one night. After coming up the slough eight or ten miles; we were at that place two nights. We did not cross that slough at that time. We had a team along with us, and we were just moving along. Whenever we could find water we camped. The water was very low; just stood in holes. That was the latter part of 1858. I think I visited the slough again in
1287 November, 1858; came up again. I struck the same slough about where Wible's camp is, just above there. I was there four or five days; then I went back to San Luis Obispo County.

Q—What was the condition of the slough where you struck it at Wible's camp?

A—The slough was deep and had plenty of water in it, water running at that time, and it was running north towards Tulare Lake. I went along the slough as far up as Buena Vista Lake from where I was camped. I suppose it was five or six miles below, towards Tulare Lake. I was hunting elk in there at that time. I prob-

1288 ably crossed the slough three or four different times; I crossed on horseback; we did not swim; we picked out places in the slough as shallow as we could find, and we crossed without swimming. I went there again in 1863. Between 1858 and 1863 I was not there. I was moving cattle there in 1863, and I struck the slough about where Dover's camp was. We were driving cattle over there, and we stopped there and turned our cattle loose, and they got on to the tules there in the slough with the first drove of cattle I brought over there. I was there a week. Then I went back and brought in another band. There was plenty of water
1289 there when we first struck it in 1863, I think it was in April, when we first struck the slough. I think it was sometime in May when we got back with the next drove. Then we struck the slough at the same place and turned the cattle loose there again, and then we came up the slough, to well—I think it was a little above Wible camp and built a little tule house and camped in there to keep the cattle from going up towards Buena Vista Lake. I was there about a month. I was watching cattle there to keep them from going up the slough and keep them from going too far towards Buena Vista Lake. During that time I didn't go down below Do-
1290 ver's camp; that is where it is now; between those two points.

Q—Where were you running your cattle? Between those two points?

A—Between those two points. There was plenty of feed there along the edge of the tules.

Q—What was the condition of the water at this time?

A—Well, there was plenty of running water there at the time, but I don't think it ran but a short distance below there. I didn't go there to the lower end of the water. The water was failing at the time I went there.
1291 I did not cross the slough at that time.

Q—You say you remained there a month. Where did you then go?

A—I went to San Luis Obispo County. I went there again in 1864, the next year. I brought some cattle over there. When I got over there the water was pretty well dried up. It was just standing along in holes; no running water. And I drove to where we first struck it. I remained there about six weeks along that slough. I was not there again in 1864. When I left there I did not go back there again that year.

1292 When I got there it was along in April, 1864, in the early part of the season. I was there in 1865 again with cattle. I was on the slough all the way from Tulare Lake to Buena Vista Lake that year. I was gathering cattle there and taking them back. In 1865 there was considerable water at the upper end of the swamp and in the slough, down in the lower part of it. There was water in some places in holes. I was there two different times in 1865. We were gathering cattle there and taking them back to San Luis Obispo County. I was there in the spring, and I was there again in the fall. When there I was crossing Buena Vista Slough.
1293 I cannot tell how many times; I crossed it at various times and at various places. I was across at Tracy's crossing several times, and I was across several places down through the tules. I could not point out any one place. There were some places we had to swim it; and some places we crossed without swimming. I was there again in 1866, about the same time in the year, in the spring, gathering cattle. In 1866 there was plenty of water there. I was there in the spring, and I was there about eight or ten days, along there in the slough. We were camped on the west side from Tracy's crossing, along down as far as the Dover place, gathering up cat-
1294 tle. I was there also in the fall of 1866. I was there about the same length of time, probably a little longer. We were branding calves and gathering up cattle at that time. We crossed the slough in 1866 at different places. I was there again in the spring of 1867. I was gathering cattle again and branding. I think at that time we were along the slough then about two weeks. I commenced at the Tracy crossing, and I continued down the slough towards Tulare Lake. We crossed the slough in some places several times, we could get across it. There was plenty of water there
1295 then. That was in 1867. I was not there any more that year. I think I was there about two weeks in the spring of 1867. I was there next in 1874. I passed through there, I did not stop. From 1867 to 1874, I was not there. While I was going up the sloughs with cattle. Between 1859 and 1867, I was at work for Mr. Thompson and James who had a ranch in San Luis Obispo County. The first two years when I went there I drove cattle from San Luis Obispo County to the swamp, and after that, we were gathering up cattle and taking them back. I think when I passed through there in 1874, I crossed the slough

1296 at the old Tracy crossing. The water was pretty deep, but it was not swimming. It was in June I think. I was there again in the spring of 1877; I think it was, or 1878. I won't be sure which. I was at work for Mr. Flint, who lived on the San Juan ranch, San Luis Obispo County. I think it was in the spring of 1878, that I went there. There was water in the slough. There was pumping going on when I went there in 1878. I could not tell how long the pumps ran. I did not stay there very long. I was there gathering up cattle and working cattle along. As soon as I got through there, I went back to San Luis Obispo
1297 County again. I was there probably a week or ten days at that time; I think, Mr. Crocker had pumps, some pumps, running at that time. I understood that Cox and Clarke had some pumps, but I didn't see them. There was one on Weed Island, the only one that I saw at the time that I was there. Yes, they had one at Dover's camp. I was there along on the slough about two weeks. The water was very low in some places. The water was standing in holes. I didn't come back to the slough to work again, any more than just to cross it. I went across there again the next year when I came there to Bakersfield. It was in the
1298 spring of 1880 that I came over here. I didn't cross there again until the spring of 1880. I crossed at Wible's camp. I staid all night there, camping as I came along. I was on the slough in 1880; that year I crossed it at Wible's camp. I was crossing back and forth there two or three times. I was working along by the Templor ranch, and was crossing back and forth. I drove a band of sheep across there at one time in 1880. I think it was in July I crossed there at the weir by Norton's camp, right below Wible's. There was water in the canal running down the canal at that time, but it was not very high
1299 though. I was not there in 1880 after that. I don't think I was. I have been there this year, along about the first of this month, April. I was down there by Wible's camp. I was down the slough pretty nearly to Tulare Lake. I don't know how far I was from it. I was down to what is known as the Tule House. The slough down there was big, and there was considerable water in it; no running water. I didn't see any running water. There was water standing in the tules there. I didn't see any water below there. I saw running water at the canal camp, Wible's camp. I saw

1300 water running in the canal. I saw water running out of the canal. It went down into the tules. It was running out of the canal into the tules. It was about 4 or 5 miles below Dover's old camp down there.

Q—Did you see the water after it went back into the Buena Vista Slough?

A—Not running water, I didn't. I was down on Buena Vista Slough, but I was down below where the water had got down to.

Q—How far south was it to where that water was running into Buena Vista Slough that you first struck the slough?

1301 A—When I first struck the slough?

Q—Yes. sir.

A—South?

Q—North. How far north of where the water was first turned into the slough was it that you first struck the slough?

A—Well, I think it was probably 2 or 3 miles; it might be further. I was at the Tule House and north of the Tule House. I was up as far as Goose Lake. I followed that slough as near as I could with a wagon all of the way up to Goose Lake.

1302 Q—When you had been down there during these numerous years, and crossing this slough from time to time, what has been the average width of the slough that you have crossed?

A—Well, I should think, from 60 to 90 feet. I can't tell exactly, but I would put it at about that width.

Q—How deep would it be on the average?

A—I don't know; there were places where it was deeper than others, but take it the length of the slough, I should think it was from 5 to 6 feet.

Q—When you have seen the water running as you say, in that slough, which way has it been running?

1303 A—It has been running north.

Q—Did you ever see it running any other way?

A—No.

Cross-examination of

M. Rogers.

I saw the water in Wible Canal. There was considerable water there. The water got out of the canal at the break of the canal, I suppose, and then it ran into the tules. I could not tell anything about how much there was in there. There was quite a stream of water in there. I should think 60 or 70 feet wide. I could

1304 not say how deep, because in some places it was deeper than others. It was deep in some places, and in some places very shallow. I don't think it would average 4 feet. I don't think it would average 3 feet at the time I was there. There was not a very large stream running, but it spread out over the bottom. I should think propably, it would be a foot and a half deep. It might be deeper in some places and shallower in others, and it went into the tules. I don't recollect where it went to. I don't know where it went to after it went into the tules.

Q—You spoke of a channel which you said would
1305 perhaps average five or six feet deep? Do you mean the channel over the swamp part of the way, or do you mean that there is a channel of that slough, without intermission, from one end of the swamp land district to the other, that would average five or six feet deep?

A—I don't know where the swamp land runs.

Q—I mean from Wible's Camp to Tulare Lake.

A—I don't think it would average that deep the whole length. I was speaking of from Goose Lake to the Tule House. That is what I was speaking of.

Q—That is the part that you are well acquainted with?

1306 A—Yes, sir.

Q—You are not so well acquainted with the other part?

A—I have crossed the other parts of the slough. I have crossed in various places. In some places it is deep, and in some places it is shallow.

Q—Isn't it several hundred feet wide in some places?

A—I have not seen any channel that is that wide.

Q—How do you know that it was a channel?

A—I have seen the water running down it, and when the water ain't running down through, a person
1307 can see the channel by the places in the tules where the water has run down, and the tules have not grown up.

Q—Isn't that a very frequent thing all over that swamp?

A—No, sir; not all over the swamp, it ain't.

Q—Ain't there a good many low places of that sort in it?

A—Oh, yes; yes, sir.

Q—A good many of them?

A—A good many of them.

Q—Did you ever trace out any channel?

1308 A—I have traced out channels; that is, along through there, where the water was, I have hunted shallow places to cross it when the water has been up.

Q—Did you ever trace out a continuous main channel through the swamp land district from Wibles to Tulare Lake?

A—No, sir; not all of the way.

Q—How much of the way have you traced the channel?

A—I have traced the channel from Goose Lake down to the Tule House.

Q—It was a continuous channel there?

1309 A—Yes, sir; it was a continuous channel there.

Q—Have you never crossed there any place where the water was spread out over the swamp, before it would connect in the channel?

A—Well, I don't know whether I have or not, because when I have crossed there, I have crossed when there was no water, and then I have crossed when there was water at different places.

Q—You have not been there when it was rising and falling to see?

A—No, sir; I have not been there to see when it was rising or falling, to state how it was done.

1310 Q—Then you cannot state how the water in making the connection through the different channels, would spread over the swamp, or how it made the connection?

A—I don't know anything about it.

Mr. Houghton. Q—When you crossed there, when it was full of water, have you always found a channel?

A—There was always running water when I crossed at these places. Whenever I was there there was always running water. I have crossed there when there was no water at all.

1311 Q—When you were crossing there, and it was full of water, what have you come across in the way of deep water?

A—Well, in crossing through there when the water was up, I have found water where it was running a pretty swift current. In some places it would be probably two, three, or four feet deep. In other places it would be shallow. There are places there where I have crossed what we would call the main channel; where the main current of the water ran, and probably it would not be more than two or three feet deep.

Q—Then, other places, how would you find it?

1312 A—In other places the water would be spread out, where it would not be so deep.

Mr. Flournoy. Q—You say you found the water sometimes only three or four feet deep, where it would be running as you suppose, and then outside of that it would be shallow. Have you ever found it when it was spread over the swamp; where it would not be deep in places outside of the channel?

A—Well, I never got into those places. There may be places of that sort, but I have always kept out of them.

1313

Friday, April 22, 1881.

T. W. Barnes,

A witness for the plaintiffs, being duly sworn, testifies:

To Mr. Houghton—I reside at Camfield. I have resided there ever since 1864. I first came to Kern County in 1861, but not on Kern River. I came to Kern Island in January, 1863; the 12th of January I went to what is called the Cottonwood Grove, or Cam-
1314 field; I was hunting for a place to make my home; I located my land there, and remained there until the 31st of May, 1867. Then I came up here, and crossed the river, and went to the head of Kern Lake; I crossed Kern River, and I crossed it about opposite the end of Chester Lane; that river is known as Old River; I then crossed what is known as Skyles' Slough here, and down it about three or four miles, and went out across the South Fork, and down to the head of the Lake. I crossed the South Fork above what is called the Sacatere by the Spaniards, at the old overland stage road, that went through there fifteen miles below here; from
1315 the crossing down to Kern Lake is about six or seven miles. At that time the South Fork was dry in holes, but there was water here and there; it was in the spring of 1863; I had hogs on there at the head of the lake for Mr. Skyles; I remained there one year; during this summer I was there the South Fork was very dry; that was in 1863; in the fall the people here had opened out the head of it, where it was choked up, and when the fall rain came, the water ran down there again into the head of Kern Lake, at the south-east point of the lake; the most of the country along the South Fork was dry

1316 during 1863, and dry until the fall and winter of 1863–4; after staying at that point a year I came back to my place, Camfield; I came back the same way I went, and crossed the South Fork; when I crossed it, and came back in May, 1864, the water was deep enough to run into my wagon; when I crossed Old River it would swim a horse; it ran up nearly over my wagon-bed. After returning to Camfield I kept the place until 1873, residing there all of the time; I won't be positive as to how long the waters ran down the South Fork. I don't think it ran there in its natural course after 1865, only in very high times of overflow; the same as in 1867; it went
1317 down in 1867; that whole country was overflowed; Bakersfield was under water at that time.

Q—How long did it continue to run in Old River—the water?

A—Old River carried water until 1867 and 1868.

Q—Then what changes took place?

A—The river changed its channel to what is now called New River and Goose Lake Slough; in 1868 it changed twice back and forth. The mouth of New River, or the head of New River, would get filled up with sand and the water would go down Old River; probably in a week from that time Old River would
1318 close up, and the water would go down New River; it changed twice in the summer of 1863.

Q—What has been the main channel since 1868?

A—It has been constantly in New River; that has been the main channel ever since 1868.

Q—During the years between 1863 and 1868, when you were at Camfield, on the head of Kern Lake, were you ever on those lakes?

A—On those lakes?

Q—Yes.

A—Yes, sir; I have been around there, inside and outside, on the tules.

1319 Q—What were you doing on the tules?

A—I was going after my hogs; I went on the lakes in a boat; we lived at the head of the lake in 1863, and boated clear down in Buena Vista Lake from my place; that was called Sportsman's Hall; I ran a boat down the lake through the slough between the two lakes, and into Buena Vista Lake; the water dried down to the channel, and left high water in the slough; my hogs would go over in there, and I could not get them with my horse, and that forced me to take a boat to go in there and get them out; the water was then going into Buena Vista Lake; that was in 1863.

1220 Q—During the years between 1863 and 1868, where did the water go to after passing into Buena Vista Lake?

A—Down into Buena Vista Slough, and in the direction of Tulare Lake north. I was on Buena Vista Slough first in February, 1863.

Q—What was the condition of the slough at that time?

A—It was quite a large stream, nearly from bank to bank. In low places it was running over. It was running towards the north. In low places the water was running over the banks branching out. At that time I
1321 followed the Buena Vista Slough about ten miles, below the Tracy's Crossing ten or twelve miles, and about opposite Weed Island, between the crossing and the Murphy Corral. I was working then with my hogs. I was again on Buena Vista Slough in 1864; I was there on the same business. In 1863 I was there from February until May, or to the last part of April; and I was on the slough then during the year; I was over there every three or four weeks during 1863; I had my hogs on the slough from the lake down to the Tracy Crossing; I had a lot of hogs of mine and a lot for Mr. Skyles on shares; I let mine go, and mine were young hogs; and that was
1322 my object in looking after Skyles', to save mine. I went on Buena Vista slough in 1864, along in May; I got back to my place along in May, the 4th of May; I don't know how long I was there; I was there on and off every week or two; I was there during that year from time to time; I don't think there was any month during the year that I was not on the slough.

Q—What was the condition of the water in 1864 on the slough?

A—It dried down considerably. It was quite low. I went down the slough in 1864, and to Tracy's camp along there; I was on the swamp again opposite, prob-
1323 ably Goose Lake, but not all the way up or down; I went in there to get some catttle that I bought from Mr. Broder in 1864; the swamp was dry down where I struck it; I don't think I was that summer on the slough at any point between Tracy's Crossing and Goose Lake; when I went down there for my cattle I found they were right opposite Goose Lake, at Broder's place, in the swamp, on the edge of this swamp; I was not up and down the swamp that season, from there to Tracy's Crossing; I probably was down as far as Murphy's Corral, on Weed Island, right below Tracy's Crossing, three or four miles,

1324 about the head of Weed Island; I don't think I was below that summer; I was there taking care of hogs, and looking after them; I think I was there first in January or February, 1865, along about that time; I was there from the lower end of Buena Vista Lake down about that far along the swamp down to Weed Island; I could not tell how many times I was there on the slough in 1865, exactly; I was on that slough a good many times during the summer; I don't think I was below Murphy's Corral, on Weed Island, any time in 1865; that season the water was dry; dried up into holes; I was there during the spring and summer months of 1866,
1325 at different points, not as close in, because I could not get in as close down the slough; I was down, following the water down to Goose Lake and back; there was a great deal of water in the country at that time; I was there in different times; I could not tell; it was along in the spring and summer months; I could not tell exactly about the date; I was there in April, May, or June, and there was a great deal of water through there in 1866; I knew of the dam to cross that slough; it was put across from the end of Buena Vista Lake; Colonel Baker put that dam across below the lake; it was put across in the winter of 1864 and 1865; I furnished
1326 Colonel Baker with the bacon that he fed his men on; I think that remained until July, 1866; I don't know exactly the month nor the day; I was below Goose Lake in 1866; but I did not follow the water from Goose Lake to Tulare Lake; I went from Goose Lake to Tulare Lake on the old road over the swamp, and struck the water again at the sandhills—what is called the sandhills; it sunk at Poso Creek; I was on my way to Visalia; there was a little space in there that I did not follow the water; the Goose Lake is six or eight miles from the main chan-
1327 nel of Buena Vista Slough, I should think; I think it was in September, 1866, that I went to Visalia; I had been along the slough from Goose Lake up to Buena Vista Lake before that time; and after, when I went to Visalia, I went from Goose Lake to the head of Tulare Lake; that was after the dam had gone away. Along in the fall there was considerable water along in the swamp.

Q—What time was it that you were on the slough above Goose Lake, between Goose Lake and Buena Vista Lake?

A—I was there in July and August; that was after

1328 the dam had gone away; there was a good deal of water in there.

Q—Were you on Buena Vista Slough, between Goose Lake and Buena Vista Lake, in 1866, before the dam washed away?

A—We were in that portion of it, there in the spring and summer; the water was not so high as it was after the dam broke; there was water in there in the channel.

Q—How did the water get there?

A—There was water in there in the channel. It was back water from the headgate of that dam that Colonel Baker put in there; I raised some of the headboard
1329 myself, and turned in water down there; there was a headgate or weir in that dam. In 1867 I was along the slough at different times, in the spring; I still had my hogs there; I never sold them out from that time; I have never sold them out; I could not tell positively if I was there every month of the year; I was down there off and on; there was considerable water in that country in 1867; I was there in 1868; there was more water there then than I wanted to cross; I was there in 1869; I could not tell in regard to the number of times exactly that I was there; I was there several times.

Q—How low down on the slough did you go in 1869?

1330 A—I think I was down the slough as far as Goose Lake.

Q—With your hogs?

A—Working back and forth with cattle and hogs; I was on the slough in 1870; I don't think in 1870 it was below Weed Island; it might afterwards; that is, along the slough I don't think I went below Weed Island; I was on the slough in 1871; the same business; there was plenty of water there in 1871; in May there was a great deal of water down in that country; I could not say as to the number of times that I saw the slough in 1871; I was there several times during that spring and
1331 summer, winter and spring; I was there also during the summer and fall. There was no water in New River in the fall of 1871 for a little while; there was water in the slough, but you may say draining water from the lake; it was draining off, of course, to the low land, seeking its level; nothing to force it; that was in the summer of 1871.

Q—What did I understand you to say about the water in New River at that time?

A—I think it was in August, 1871, I was Superintendent of the Buena Vista Ditch Company; there was a

1332 call made for water by one of the Company, and I turned in all of the water there was in the river into that ditch; I think it was in August, probably, 1871. I was on the slough in 1872; probably I went down at the same point to Weed Island—Murphy's Corral; I was not there every month in 1872.

Q—You say that you were down to Weed Island several years. Did you cross to Weed Island during those years?

A—Yes sir; I was there in the fall of 1871; I was there in the summer of 1869, on Weed Island and on the upper end of Broder Island; I swam into the Broder
1333 Island, I think, in 1869, twice; I swam the horse; I was on Broder Island probably three or four different times; I have crossed at different stages of water; I have crossed it when it was perfectly dry.

Q—When you found running water there, how deep would you find the water in making your crossing to Broder Island?

A—Well, where the trail went over—the highest time I ever was in there—it swam my horse. I suppose there was about six or eight feet of water.

Q—What would be the condition of the water in making the crossing to Weed Island?

1334 A—When I went to Weed Island the deepest water I found was about up to there (breast high). I left my horse on the other side; I went on to Weed Island in 1866; the deepest water I found, struck me about shoulder high; I left my horse on the other side; I also crossed on to Weed Island in 1872; there was a great deal of water there in 1872; about the deepest water I found then was probably three feet, going on to the island; I was on the upper end of the slough in 1873; I don't think I went down to the island in 1873; in 1874 I was not far down; I don't think I was below Wible's Camp in 1874; I was on the upper part of the slough;
1335 I went down to about Dixon's and Wible's Camp, and along there; I was there in 1876; I was at Wible's Camp; I don't think I was two miles below Wible's Camp in 1876, right along the canal; I hauled from the time they commenced the canal; I was freighting there for the company; I was down there in 1877—as far down as the canal—probably twenty miles below the main camp; I could not state how many times I crossed that slough in 1877; there was hardly any eight or ten days that I was not crossing that slough, going to the camp with freight; the slough was dry;

1336 the water was only in holes that I could find—no running water; in 1878 I was there, down as far as the Canal Camp, at the upper end of the Island; I was only on the slough from the Canal Camp along up towards the lake—I mean Wible's Camp; there was some water there in the camp in the spring and winter of 1878—in the latter part of '78; I don't think I was down there. In 1879 I was at one time at Wible's Camp; I don't remember when it was, but I think it was along in the spring; I was down on the slough as far as Dixon's in 1880; I went down to Dixon's; I don't remember what for; I went to see the old gentleman; I was there at his
1337 place once or twice during the summer of 1880.

Q—At about how many points have you crossed Buena Vista Slough, starting from Tracy's Crossing, and down to Goose Lake?

A—Well, that would be a right hard matter for me to tell; going in and out there so many years, I could not tell you exactly how many places I have been.

Q—How many do you think?

A—I will relate as near as I can; I can not tell you the different points I have been on the slough, or cross the slough; I can not tell you the exact date.

Q—Tell as near as you can; we do not expect you to
1338 tell every point?

A—I have crossed at the Canal Camp at Weed Island—the upper end of Weed Island; I have crossed Weed Island; I have crossed the sloughs going north of Weed Island, and I have crossed down along side of Weed Island on both sides clear across the swamp; there from De Webber's place to the little corral; I have been clear across that slough, the swamp there, freighting across there.

Q—When you have made these crossings, and the water was running in the creek, how deep did you find the water?

1339 A—I never measured the water in the channel; I never measured the depth of it.

Q—Would it be swimming?

A—I found it deep enough to swim most anything; deeper than I wanted to go through; I have found the slough swimming, and I have found them dried down into holes; when the water was running full it would swim most anything.

Q—Going across the slough, when the water was running there, how far did you usually have to swim? How wide did you find the channel?

1340 A—That would be rather hard for me to say; a man riding along, going with his team, hardly ever thinks about the question being asked him—how far the channel is. I suppose the widest channel there is sixty to one hundred feet wide, opposite Weed Island; the main channel of the slough would be probably from sixty to one hundred feet wide; may be more, may be less; I would not say exactly the exact width of it, because I never expected the question to be asked me.

Q—What is the nature and condition of that channel when you have crossed it and been along it there; where it leaves Buena Vista Slough at the head of
1341 Weed Island?

A—Well, it is a well-defined channel down to the head of Weed Island; there the channel was choked up in 1868; 1867–68 that was overflowed by logs and drift; the channel choked up there.

Mr. Garber—What was that question?

The reporter reads the last question.

Mr. Houghton—Buena Vista Slough that should be.

Mr. Garber—That is not the same question then.

Mr. Houghton—He answered as to Buena Vista Slough instead of Buena Vista Lake.

The Witness—From Wible's Camp to Weed Island.

1342 Q—Where was that drift, you say?

A—That drift was right at the upper end of Weed Island.

Q—What did the drift consist of?

A—It consisted of pine, redwood, and spruce—such as grows in the Sierra Nevadas—driven into here by the overflow of 1867 and 1868, the same as thousands of other drifts in the river here; I saw logs in there, when I first found it, which were probably two feet in diameter, and of various lengths; some posts four or five feet long and some probably ten or twelve feet?

1343 Q—Before that drift formed there, where did the main channel run?

A—It ran right along by Weed Island; along there.

Q—After the drift, where did the main channel run?

A—It kind of broke off with two separate streams, one to the east and one to the west, and worked off to the low ground.

Q—What was the condition of those channels from the head of Weed Island down to Goose Lake, where you have been in there?

A—I have found the channels nearly every place I crossed it; I never followed the channel from there to

1344 Goose Lake directly along the channel, but I have struck the channel at different places.

Q—And when you have struck those channels in different places have you found water running in there?

A—Sometimes I have found water; there is a drift there.

Q—I mean in reference to whether the water would be running.

A—Yes, sir.

Q—In what direction?

A—It run north; to the west of north.

Q—How wide would the channel from Buena Vista
1345 Lake to the head of Weed Island average?

A—From Buena Vista Lake to the head of Weed Island?

Q—Yes, sir.

A—Well, I don't know; it is only supposition with me; I have never measured them, but I should say it was 200 feet wide .

Mr. GARBER—Wide?

A—Yes, sir; the slough from Buena Vista Lake down to Wible's Camp or Weed Island.

Mr. HOUGHTON. Q—How deep would that average running down there, Mr. Barnes?

1346 A—I think the water in there is twenty feet deep when it is full, or sixteen or eighteen; from that down to four or five feet; there is a place that I am satisfied that when it is bank full it would be twenty feet, when running over the banks.

Q—What was the average width of the channel you have spoken of below the head of Weed Island and down to Goose Lake?

A—The main channel there opposite Weed Island, I think, is all of 100 feet wide, and probably more; I would not say positively the exact width of it, because I never measured it. I have seen the crossing, and
1347 have crossed it when I had no team, and have probably crossed there when it was dry; I never expected the question would be asked me; I never paid any particular attention; I know it is a good deal larger there than my pole and wagon and all, when I had a long hay frame on my wagon, hauling hay.

Q—How deep was the water there in that channel when it was running, when it was full?

A—Well, various depths, like all streams, shallow and deep; there are places a great deal deeper than others, but deep enough to swim a horse when even banks full.

1348 Q—Have you ever been in the channel below Goose Lake, or between Goose Lake and Tulare Lake?

A—I have not been in the channel between Goose Lake and Tulare Lake to follow the water from Goose Lake to Tulare Lake; I saw it when it was spread out in 1868 and 1869. I know where the waters of New River enter Buena Vista Slough.

Q—At how many different points do the waters run in there?

A—It goes into the slough at three different points; the fourth point runs into the lake; the east side of Buena Vista Lake, about the middle of the lake; start-
1349 ing from Section 24 it leaves New River at Tracy's Crossing.

Q—We will take the channels as we come to them; going down the river you say there is a channel at Section 24 that runs into it?

A—That goes through the Lake Ranch into the head of the lake; east side of the lake.

Q—How high does the water have to be in the river before any water will run into that channel you speak of?

A—Well, when it begins to run up over the banks it takes this channel.

1350 Q—It has to be bank full to run over there?

A—Yes, sir; just bank full and running over it, it takes this channel; when the water goes down it leaves the head of this channel choked up; when it begins to run over it makes quite a channel of water running into the lake.

Q—Passing down from that channel what channel will you find next?

A—Find next what is called South Fork Channel; it runs into it near Wible's, the swamp land in there. There is a levee across Buena Vista Slough, and they has a weir.

1351 Q—Where does that water enter on to, or reach Buena Vista Slough?

A—Well, when it comes down there the same as this one the lake was dry, and the slough was low; it empties into the slough, and runs up toward Buena Vista Lake; it is running there now; I was there two weeks ago to-day.

Q—Was all the water that was running down that South Fork, or branch, as you call it, running into the lake?

A—Well, I think the major part of it was running

1352 there; some was going below, but the major part of it was running there; I could not say that it all goes there into the lakes, but the majority of it, the major part of it, to filling up the lake.

Q—Then what channel do you come to after that last channel?

A—You come to what is called the middle channel; that goes into the slough also.

Q—Where do the waters that go through that channel run after reaching the slough?

A—The most of the time it runs up the slough and into the lake, until the lake becomes full.

1353 Q—From that middle channel?

A—Yes, sir; a portion of it may go below; until the lakes fill up it runs up into the lakes; I think I last saw water running into that channel in the month of February—January or February; I was over on to it, but there was not much this year, 1881. I think it was in February that I went over on to the middle channel, but I won't say exactly the time.

Q—Where does the water run that runs in this third channel that you speak of?

A—It runs into Buena Vista Slough also.

1354 Q—After reaching Buena Vista Slough where does it run?

A—Its natural course is northwards, towards Tulare Lake and Weed Island.

Q—What was the last time you saw water running out of Buena Vista Lake?

A—In the summer of 1879; there was only a small stream running out; the lake had drained it down; just a small stream; I went across it a great many times in the summer of 1879.

Q—What was the condition of those lakes there from the first time you knew them in 1863 down to that time

1355 —from 1863 to 1879.

A—Well, sir, at times it was very high over all of the swamp country, and at times it kept getting lower, until 1879, it dried down to nothing; last year it was so dry that you could not see water anywhere in the lake, except what ran through those branches you know; it did not fill up the lake; from 1863 to 1879, in the seasons of flood, the lakes were very deep; in 1868 and 1869, I think there was fifteen feet of water in Buena Vista Lake.

Q—How long did that continue; how long did those lakes continue to be full during the wet season; when the water was running down the river in the spring?

1356 A—Well, I think up to about 1876 and 1878; it has been receding every year, and getting less and less, until last summer it dried out entirely.

Q—What was the condition of those lakes in the summer, between 1863 and 1879; after the spring freshets were over?

A—Some seasons it was lower than others, owing to the amount of water that came from the mountains in the season.

Q—Would the lakes be full or empty during those years?

A—There was water in them every year, I think.

1357 Q—How many years would they be overflowing, or water running out of them?

A—The waters never dried down in the tules, or tule land, until 1879.

Q—Well, between the years 1863 and 1879, how many years have you seen the water discharged from Buena Vista Lake into Buena Vista Slough?

A—Every year it would proceed down the slough. That was the only outlet.

Cross-Examination of

1358

T. W. Barnes.

Mr. Flournoy. Q—You say that in 1867, there was considerable water in the slough; what time of the year was that?

A—I think it was in the winter, probably December or January. In the summer of 1867, that country was all dry. In the winter of 1867-68, was the time that I was speaking about the water, and not 1866 and 1867. There was a rise in the water in the winter of 1867, 1868. But in the summer of 1867 it was dry. The

1359 whole swamp was dry from the De Webber place across. Mr. Crocker had a number of wells there to pump water for cattle. I camped at his well. In 1867, they were pumping. There was considerable water down there in the summer of 1870. There was plenty of water there then also in 1871. In 1872 I think there was considerable water along there; more confined to the channel; not quite as much as there was in 1868, 1869 and 1870. It was diminishing gradually. I did not follow up the channel from Goose Lake to Tulare Lake. At that time I went from Goose Lake to Tulare Lake.

1360 I went right along the edge of the water before the whole country was overflowed. That was in 1868. I went down there with a rodeo company and crossed at Goose Lake. I never followed the channel all along down.

Q—Do you know anything about whether it shallows out so in places, that in a rise of the water, the water would run out into portions of the swamp before it connected in the channels?

A—I imagine there are such places as that, as in all streams. Now Kern River spreads out all over the country at a high period of water.

1361 Q—I mean before it would connect in the channel; for instance the channel is shallow and deep along there, and in some places it spreads out. Do you know whether or not when the water is rising, it would not spread out some over the swamp country before it would make a complete connection through in the channel?

A—It might; I could not say as to that, because I never followed the channel from one end to the other. That was not my business.

Q—You generally found water whenever the water was very plentiful. It was all about the swamp wasn't

1362 it, when there was plenty of water?

A—When there was plenty of water, when the water was running, I have found water all over the swamp at high periods of water; and at other times I have found it confined to the channel and in holes; dried down to holes. In 1870 there were very few holes that had much water in them. In 1877 it was confined generally into holes.

Q—I mean when the water would be running, or swimming, as you speak of?

A—Yes, sir; it was over a great deal of the country, the same as Kern River is, or any other stream. It

1363 overflows its banks and spreads over a large scope of country.

Q—Were you ever there on the banks of what you call the slough, when they were full, and there was no water in the swamp?

A—Oh! I found water in different places; maybe it had broke out from the slough.

Q—Isn't there always water in the swamp about the time the slough is full, all along the channel?

A—By its being full from place to place, I should think you would find places, most of the distances,

1364 when it would break over; some places lower than others, some places higher. Of course, before it would rise to the highest bank, it would run over in the lower places, making through the swamp.

Q—Did not the water, whenever you found the channel full, as you call it; would not the water be generally spread out in the tules?

A—Spreading out over the low lands, of course; the same as any other stream; the same as Kern River.

Q—Well, you say the same as any other stream. Does every stream, when its banks get full, have to spread out on the surrounding country?

1365 A—If there are low places, it will go out through them if it is full to the high banks. If it is only full up to the low banks, there is not any place for it to go out.

Q—Well, that is just what I am asking you about now. When it fills up as full as it can hold through the connection. I mean inside of the slough as much as those banks will hold; isn't it at the same time out in the tules?

A—No, sir; it cannot go out if it is only full to the top of the banks.

1366 Q—Well, do you know that you have ever seen it that way?

A—I could not find no water outside of it if it was running down inside the banks.

Q—Have you ever seen it when you were crossing the channel in that way—the way you speak of? Have you ever seen it in that condition at all when it was not out in the tule?

A—When I would swim; have to swim these places; why, it would be bank full and running out and spreading over in the swamp.

Q—Have you ever seen it when it was just bank full?

1367 A—No; not from one end to the other.

Q—What I mean to get at is this: After that shallows out and spreads out and it is in holes; when the shallow places that you speak of——

A—[Interrupting]—Low places.

Q—The wide channel fills up before they fill up. Can any water get into the tules clear through, I mean; not in one place?

A—Oh, I don't think it was clear through. I think it would find some places where it would run over. I think at different times it was run over and spread out into the swamp.

1368 Q—You don't know whether the channel is a defined and marked channel.

A—Clear to Tulare Lake? I don't know.

Q—Or clear to Goose Lake?

A—At the head of Weed Island, at Goose Lake. I went across it; and, as I stated, at different points. I never followed the channel from Weed Island to Goose Lake.

Q—Then you don't know whether there is a channel there?

A—There is a channel there, but I never followed it clear through. I have crossed it at different points.

1369 Q—Have you ever found more than one channel through that country?

A—Yes, sir; I have seen more than one channel.

Q—Ain't there numerous deep places when the water is high?

A—There is two or three, I think.

Q—Ain't it moving—a current along the swamp?

A—Yes, sir; when it is full. It is moving to the full width of it as far as I went, and when it falls it drops down into holes.

Q—You have never been there watching it during a rise and fall, have you, with a view of ascertaining

1370 how the water disposes itself?

A—In the spring of 1868 I started from my place with some of my neighbors and crossed New River to Goose Lake; there we swam the river on to Goose Lake Slough, a prong of New River; and we turned down the water on the other side, to the sinks of Poso Creek, to Tulare Lakes, to gather cattle. I had a band of cattle that I was interested in; and my neighbors got me to go and pilot them through. I swam New River at Tracy's Crossing, swam the horses and got them through the best we could, pulling the wagons over with ropes; and we made a raft at the

1371 head of Goose Lake or the Broder corral, and rafted our things across there, swam our stock across there, and we taken right down the water on the east side to the Tulare Lake, and from there we worked back. I came back up opposite the McClung ranch, and there I swam Goose Lake, branch of New River; swam our stock over. Mr. Tracy was in company with us. That was in 1868, March, 1868. All the water I saw then from Kern River, on Kern Lake, was going into Tulare Lake. That was the time of the big flood in 1867-68. The water reached my place the sixth day of December, 1867. I shall never forget it.

1372 Q—Did you never see the water back from Tulare Lake up into Buena Vista Slough?

A—No, sir; I never saw it.

Q—Running from Tulare Lake back?

A—No, sir; I never saw it. I have never seen the water run from Tulare Lake back into Buena Vista slough. I have seen it run from Buena Vista Slough the other way, towards Tulare Lake.

Q—You have never seen the water of Tulare Lake run up into Buena Vista Slough?

A—No, sir; I never saw it run up into Buena Vista Slough; I have seen it run from Buena Vista Slough
1373 the other way.

Q—Well, what I asked you was, whether you ever had occasion to notice the rise and fall of the water down on the slough, to see how it would dispose of itself in rising and falling; to see how it distributed itself?

A—In all of the rising of the water you will see it running to the north.

Q—Well, I am not speaking of the course of the current; I mean, how it disposes itself in the swamp. Did you ever watch it with that idea?

A—Well, it ran in that direction when it was rais-
1374 ing; when it was falling it fell back down, dropped into these holes in that deep slough. In 1880 the whole of Buena Vista Lake drained right down into these holes, into Buena Vista Slough, into the channels of what we call old Buena Vista Slough, between Buena Vista Lake and Tulare Lake. Of course if there was any water on the outside, I would have to come to those holes. The lake itself has drained itself into Buena Vista Slough, perfectly dry. Ever since I have known Buena Vista Slough, I suppose it has always got the major part of its supply of water from Kern
1375 River; that is, the main part of the water that empties into that slough and the lake. I have found always that Kern River carries its waters into Buena Vista Lake, Kern Lake, and into the slough, those three points.

Q—Where is the first place that the water comes from, that goes into Buena Vista Slough, at the present time?

A—It comes from Kern River.

Q—Sir?

A—At the present time it gets its water from Kern River.

1376 Q—Well, you have already stated that the water from the south fork and middle fork ran into Buena Vista Lake until the lake filled up?

A—The old south fork empties into the slough, and follows the slough up into the lake.

Q—Hasn't it got its supply of water from Buena Vista Lake?

A—Well, when the water ran into Buena Vista Lake and Kern Lake, of course when the lakes were full it run out down Buena Vista Slough.

1377 Re-direct examination of

T. W. Barnes.

Mr. Houghton. Q—What did you say as to the year 1871 being a dry or wet year, if anything?

A—Well, in the spring rise we had considerable water in 1871. In August, 1871, I closed all of the water out of New River into Buena Vista Ditch, for irrigating purposes. Pumping was going on on Buena Vista Slough in 1877. Mr. Crocker had those pumps there. They were used in pumping water for cattle and stock.

1378 Q—When water was running down the South Fork of Old River, into Kern and Buena Vista Lakes, after the lakes were filled, where would the water go?

A—Down Buena Vista Ditch or Slough.

Q—Down Buena Vista Slough?

A—Yes, down that channel.

Q—When the waters run from these lakes to the branches you speak of running out of New River, where would the waters escape after the lakes were full?

A—After they would fill up the lakes it would go down to Buena Vista Slough. I don't know of any

1379 other outlet.

Q.—At any other time when these lakes were filled, Kern and Buena Vista, the waters would run out down through Buena Vista Slough?

A—They would run down out through Buena Vista Slough. There is no other resource that I know of.

Q—You state that when the Buena Vista Slough was full and overflowing, it would overflow its banks at low places, the same as Kern River?

A—Yes, sir.

Q—Have you ever seen Kern River during the floods, when it would overflow its banks?

1380 A—I have seen it overflow this whole valley very nearly.

Q—Take the usual spring freshet, along the New River, when the waters were running down from the melting snows, does that river overflow its banks at low places?

A—Yes, sir.

Q—Is that so every time that the river is running down in the spring season?

A—Whenever it comes a spring raise there is places it will spread out and get out of its banks; low banks.

1381

Re-cross examination of

T. W. Barnes.

Mr. Flournoy. Q—When Kern River overflows its banks, what becomes of the water?

A—It stands out, breaks out, and would probably go on in other places, where it can strike a channel again. It works off into small streams.

Q—Does it run down to Buena Vista Lake?

A—It runs in the direction of Buena Vista Lake.

1382

Charles D. Gibbs,

A witness for plaintiff, being duly sworn, testified as follows:

To Mr. Houghton. I am a civil engineer. I have been engaged as civil engineer since I came to Californio in 1849. I was Deputy U. S. Surveyor-General under Mr. Hayes from 1853 to '54.

Q—Did you at that time, as such Deputy Surveyor, make any surveys in what is now Kern County?

A—Yes, sir; I made that south of the 6th standard;
1383 from the township line, between 24 and 25 west, to the Coast Range, between the 6th and 7th standards. I did that in 1854. The sixth standard runs from the south end of Tulare Lake. It is the boundary of the county. I surveyed over the Township line, between Townships 24, and 25. And I surveyed the following Townships: 25 S, 17, 18, 19, 20, 21, 22, 23, 24, 25 E.

Township 26, S., 17, 18, 19, 20, 21, 22, 23, 24, and 25 E.

I surveyed clear down to the 7th standard.

27 S., 19, 20, 21, 22, 23, and 24 E.

28 S., 19, 20, 21, 22, 23, and 24 E.

1384 On the east side I only ran the township line.

On the west side I ran the township and subdivisions. I did that in 1854.

Q—During that time did you cross Buena Vista Slough at all?

A—After I got to running these township lines I crossed Buena Vista Slough, but my camp was at Goose Lake. I came down, I think, between where this channel is represented, and the swamp land. The channel marked on the map as Goose Lake Slough. Between that and the swamp land, trying to get my wagon over, when I got at the end of the tules, some-
1385 where along in there, as soon as I got south of the tules, I then crossed here and went back here on the west side of the swamp.

Q—How far did you cross from Buena Vista Lake?

A—I can only judge by the map, for I never was any further south than there; about five or six miles, I should think, north of Buena Vista Lake, and I went to the west side.

Q—What was the condition of the water in the channel at that time?

A—It was bank full where I crossed it. It was a narrow stream. It was not overflowing there. I should
1386 judge it was 100 feet wide. We worked all day crossing it. I did not measure it. The water was running. It was running north.

Q—How did you make the crossing there, Mr. Gibbs?

A—When I got there I could not find a single stick of timber of any kind, or willow; everything was bare. I had two wagons, one a four-horse team, and a spring wagon. I ran the four-horse wagon up close to the edge of the slough, raised the pole up and fastened it back to the hind wheels, then put one of my halters—
1387 run a stake rope in the halter ring and tied that up, and made the boys swim over and tie the rope on the other side. My stake ropes, I suppose, were over a hundred feet, 100, 120, or 130 feet, may be 150 feet long, long enough, at any rate, to reach over the slough; then I slung everything across there.

Mr. McAllister. Q—On the ropes?

A—Yes, sir; on the ropes.

Mr. Houghton—How did you get your wagons over?

A—Well, after we got them we lashed the front wheels so that they would not separate from the couplings, and put ropes in the tongues and sent the boys

1388 over, and then put stay ropes on both sides, and one stay rope at the bottom to brace it, to keep the current from swinging it around, and they dragged them through.

Q—How deep was the water when you took them through?

A—Well, as near as I can recollect, when I went there I made them sound along the different points, and my impression was it was 25 or 30 feet deep. It was the narrowest place in the slough, and there was no water on either side.

Q—Was it so deep that your wagons disappeared
1389 when they crossed?

A—Well, the four-horse team was not a very deep wagon; the spring wagon—the spring wagon was one of those old fashioned carryalls, with a high top; I had to put two ropes, one to the axle and one to the top, to keep it from swinging over; and when we sent them in it went entirely out of sight. It was some depths down, because we could tell by the rope we let out. We drew it up on the other side and drew it out; we couldn't see either wagon.

Q—What kind of a current was there there at that time?

1390 A—Well, there was a pretty steady, strong current; swam bank full. It wasn't a very rapid current; it was a good strong current. That was in May, I see by my field notes. I started on this line on the 12th day of May, from the standard line between 22 and 23, and I crossed there between the 23d and 24th, I should say; I think it was the latter part of May. It took me some time to do this work in here.

Q—Did you at any time strike this slough at any other point?

A—Well, I struck the slough, running in this line,
1391 between Townships 26 and 27, range 22. That was also in May, 1854.

Q—What kind of a slough did you find there?

A—It is put down in my field notes as a very deep slough.

Q—Was there much water running there?

A—Yes, sir.

Q—In what direction?

A—North. I did not follow that slough at all. I ran right up to it. I was only running the Township line. I put my meander post directly on it. It does not show here on the map at all.

1392 Q—Did you strike the slough on that survey at any other point along there?

A—I attempted to run a line across between Townships 26 and 27, Range 22. If you will let me read my field notes, I will show you exactly how I ran.

[Witness produces his field notes and explains to defendant's counsel].

To Mr. GARBER—This book contains no private matters, and I have no objection to your examining it. T. 28, 23, is southeast from Goose Lake. T. 27, 23, takes in a portion of Goose Lake. It is no use reading it all. I will mention commencing at the corner of
1393 Ranges 22 and 23, T. 26 and 27, I ran west 3 miles; then I went west on the fourth mile. That, at 7 chains 20 links, entered tule lands on the slough between Tulare and Buena Vista Lakes.

Q—This is your handwriting in this book?

A—Yes, sir. 19 chains to stream of water, 200 links wide, 3½ feet deep, course N. 37 chains to stream of water 400 links wide, 5 feet deep, course north.

Mr. GARBER—400 links wide?

A—Yes, sir.

Q—How much is a link?

A—That is four chains. A chain is 66 feet; that
1394 would be 260 feet, somewhere—264 feet.

Mr. HOUGHTON—Where is that on the map?

A—That is on this Township line, northwest of Goose Lake, running along in here, in Range 22, between 26 and 27. At 40 chains the water was five feet deep. At 60 chains the water was three feet deep. At 62 chains, 50 links, I set a flag on dry ground to triangulate from this side, when I got across. At 63 chains, entered swimming water, which being impossible, I determined to stop and triangulate from the opposite side. This deep water was at 63 chains on the 4th
1395 mile, that is, about three-fourths of a mile from the third corner post.

Mr. GARBER. About midway of the swamp?

A—No, sir. The swamp here is a little over two miles wide. It is about three-fourths of a mile.

Mr. HOUGHTON. Q—One-fourth of that last mile is on high land?

A—At seven chains and 20 links I entered the tules from this corner; and on that map it is represented as high land.

Q—Will you mark on that map 3 about where that point will come after running the number of chains mentioned, when you came to swimming water?

1396 A—After we got to 3 feet of water. I set the flag on dry ground, close by the bank of the slough. It was a very narrow place, and I set a flag there, that is the bank of the slough. That is where I have drawn the pencil mark, and that is where I reached swimming water, and about three-fouths of a mile. I just ran the pencil across the line to show where that would be, where the swimming water was. I took up the bank of the slough just at the end of this. I see "overflowed tule land. Tules from 15 to 20 feet high."

Mr. HAGGIN. Q—You have made a mark here at the northwest corner of the quarter?

1397 Mr. HOUGHTON. He did not say that. It is on the north line of Sec. 4.

A—Yes, sir; 60 chains, which is a quarter of a mile from the northeast corner of Section 4, in Township 27 South, Range 22 East.

Q—Now, Mr. Gibbs, will you please step to this map, and locate where that will come on that map here, Map 3? Here in 27-22 is the Section 4 you refer to. That is your starting point. You came here 3 miles?

A—There is the half mile; it will be there.

Q—It would come right where the most westerly slough runs through that Section 4, would it?

1398 A—Yes, sir; but what this slough can be I don't know. That water was 5 feet deep, and passing through the North line of Section 4, the most westerly branch of it.

Q—Now, will you turn back and see where you struck the water?

A—I say at 37 chains to swimming water, 37 chains from the Northeast corner of Section 4.

Q—How do you say the water was?

A—I stated the water would be 5 feet deep. The water was up to your neck.

1399 Q—Now, where would that come? Well, you fix that on this map, where 40 chains would come.

A—Here is a half mile, 40 chains, that would bring it right there.

Q—Brought it right to the other slough designated on that map?

A—Yes, sir; I never looked at this map here.

Mr. HAGGIN. Q—You say that at 37 chains you struck a stream, how wide?

A—400 links, that is, 4 chains. And 5 feet deep. But I state at 40 chains the water was 5 feet deep; and that would be about the centre.

1400 Mr. Houghton. Q—Then at the line running from the centre of section 4 the water was 5 feet deep?

A—Yes, sir; that 40 chains would be half a mile.

Mr. Houghton. Q—My attention is called to the fact that I referred to the channel that you reached at 37 chains, as the most westerly channel on section 4. It is the most easterly channel, isn't it? I used the term westerly.

A—That is the most easterly, but the one you first made me describe is the most westerly. The one I struck at 37 chains west from the corner is the most easterly channel, and there was 5 feet of water right there. At
1401 60 chains we found water 3 feet deep; at 62.50 I set a flag on dry ground; a little narrow strip; I supposed it might be the bank of the slough. Then at 63 chains "entered swimming water; it being impassable; determined to stop and triangulate from the other side." This did not come on the survey. I was trying to run the line through.

Q—What did you find in connection with the other slough you were speaking of?

A—Well, I found another slough here on Range 22, between 27 and 28 south. I commenced a line at the
1402 northeast corner of Section 1, T. 28, R. 22, the northeast corner. It is the township corner, and ran west 2 miles on the open ground. "Then at 40 chains I set "one quarter section post and deposited charcoal and "raised a mound with trench, as per instructions; 147 "chains set another post corner on the margin of deep "slough; deposited charcoal, and raised mound with "trench, as per instructions. The course of the slough "is west of north. The land ascending; third-rate, "heavy tule swamp on the west of the slough."

Mr. Houghton. Will you designate on that map with your pencil where that slough would fall?

1403 A—This would be one-half mile; I think I said 47 chains.

Q—Is that all you have, all of the notes you have, relative to these lands; relative to this slough?

A—Yes, sir; relative to those two sloughs. That is all; you can see my diagram of the slough here when I struck it. It is marked "Deep Slough."

Q—That is a sketch of the slough in the field notes in pencil; you made this little sketch for a branch of the slough there at that time?

A—Yes, sir.

1404 Q—Will you look at this diagram. [Map marked No. 6.] Did you ever see that before?

A—Yes, sir. I made it from 13 township plats that you handed me. They were each one sectioned by itself. I just connected them; it is also from my survey up there from Townships 27 and 28, R. 22 and 23.

Q—Did you, in making that map, use any township plats in the U. S. Surveyor-General's office; or consult them, other than those I gave you; any of the official plats in the U. S. Surveyor-General's office?

A—Yes, sir. I went back to examine two, because they did not compare.

1405 Mr. GARBER. Q—What are these little figures, 112 and 120, 47 and 60?

A—I suppose that is the width of the slough; the streams; I put them on, but they were copied from the Government maps. It was just to connect the work from the large maps to put them in a condensed form, to show the relative conditions.

Mr. GARBER. You see where Goose Lake runs, Mr. McAllister?

Q—This is Goose Lake Slough, isn't it?

A—That is what it is called there, sir.

Q—I understand you, that this was made from the
1406 official plats in the U. S. Surveyor- General's office?

A—Yes sir.

Mr. HOUGHTON. I will ask you if those are the plats which you made this map from?

[Flats shown the witness.]

A—Yes, sir.

Q—How many of these township plats?

A—There were 13 I copied.

[The plats are marked Maps 7 to 19, inclusive.]

Mr. HOUGHTON—I offer in evidence the certified copy of township plat of T. 28, S., R. 24 E. Mount
1407 Diablo base and meridian, certified by the U. S. Surveyor-General for the State of California.

Mr. GARBER—For what purpose?

Mr. HOUGHTON—I offer it generally.

Mr. GARBER—I would like the counsel to state for what purpose it is offered.

Mr. MCALLISTER—What is the number of that?

Mr. HOUGHTON—No. 7.

The COURT—For what purpose is it offered?

Mr. HOUGHTON—To show the physical condition of the country represented upon this map, as required to be placed upon it under the Act of Congress, and the manual governing these public surveys.

1408 Mr. GARBER—We object to the introduction of this testimony, upon the ground that any statements made or evidence manufactured concerning these facts are not binding upon us and is hearsay; that we are not bound by the actions of United States officials in making recitals or statements here as to the existence of physical facts, and that as to those matters it is not evidence against us.

[The objection is overruled and defendants except.]

Mr. HOUGHTON—Then I will offer the remaining 12 maps, Nos. 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19.

[Defendant objects on the same ground as stated in
1409 the objection to Map No. 7.]

Same ruling and exception.

[Here insert maps Nos. 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19.]

Mr. HOUGHTON. Q—Mr. Gibbs, will you take that plat marked 8 and look at it?

[The witness does so.]

A—I have been U. S. Deputy Surveyor. I have surveyed public lands and platted them

Q—Will you tell me what the meaning of these figures
1410 are that you find by the side of what is marked as "Buena Vista Slough," at the northern boundary of that township?

Mr. FLOURNOY. Find out how the figures got there; whether he put them there.

Mr. HOUGHTON. He did not put them there; that is a certified copy.

A—They represent the width of the slough in links where that line crosses the slough.

Mr. GARBER. I move to strike out that testimony as to the meaning of the figures, on the ground that it is not the proper subject of expert testimony.

1411 [Motion denied. Defendants except.]

The WITNESS. I have been a U. S. Surveyor.

Q—What do figures of that kind show upon that kind of survey?

A—Wherever a line crosses a slough or arroyo, or anything of that kind, we are bound to give the width of it; and put it down in figures.

Q—Then upon that map wherever those figures appear on the section lines, they represent the width of the slough?

A—Yes sir, a river or arroyo; whenever we cross a

1412 river, slough or arroyo, we have to give the width of it in links.

Q—Is there anything required to be placed upon a Government plat like that, to indicate which way water runs; that is a running stream?

A—Yes sir; we generally indicate that by a little arrow, pointing to the course down stream. The direction of the head of the arrow shows the course of the stream.

Mr. HAGGIN. All that appears upon those plats is put down upon this map?

Mr. MCALLISTER. Q—This number 6 embraces all
1413 of the plats made up by yourself; as I understand you, you have expressed on map 6 all that is expressed on those plats?

A—Yes, sir, and more besides.

Mr. HOUGHTON. Q—What are the figures there from where the slough leaves Buena Vista Lake.

A—4.90.

Q—And that represents what?

A—Four chains and 90 links, or 490 links.

Q—What are the figures upon that slough, where it crosses the next section line north of that?

A—It looks like 307; either 7 or 17. I could not
1414 scarcely make it out

Q—Then what are the figures you find on the map where the Buena Vista Slough crosses the northern line of the township?

A—I find two sets of figures; one is 925, and the other is 412

Q—What does the 925 mean?

A—I think that is the distance from the corner of the section to the slough. The 412 means the width of it.

Q—I hand you plat of T. 30, S., R. 25 E., map No.
1415 15. The date of that survey I see is September, 1853, and January 11th, 1854.

A—The section and township lines were run by different parties.

Q—What figures do you find upon this plat upon the west line of 31; where what is called the Buena Vista Slough on map No. 15 crosses the section line?

A—Which do you mean?

Q—On the east line of 31?

A—318; that means 318 links, and it represents the width of the slough. These were all surveyed in 1853 or 1854.

1416 Q—Then I understand you, that upon all the United States maps, where figures are put on, where the stream or slough crosses the section or township lines, they represent the width of that stream in chains or links?

A—It is put down about 412. It means there 4 chains and 12 links; or 412 links. It arises from the fact that 100 links make a chain.

The plaintiffs offer in evidence the plat made by Mr. Gibbes, marked Exhibit 6. The same objection and ruling is made as was made to Map No. 7, and defendant excepts.

[Here insert.]

1417 Q—I call your attention to a slough appearing upon map No. 6, running across that Township line between Townships 27 and 28, in R. 22. Is that placed there in accordance with, and shown there as it is designated upon or read from your field notes?

A—Yes, sir. The length is a little greater, perhaps, than I had down there, but as far as I could say, it is about right.

Q—What appears upon that plat in connection with the water which you discovered upon the Township north or between 26 and 27 in the same range?

A—Well, where I crossed it there, we got to swim-
1418 ming water, in a little west of north, about a mile.

Q—Is it correctly delineated upon that map?

A—Yes, sir; It is marked here in blue lines.

Q—Is there anything there to represent where you found the water which you had referred to in your field notes, and if so what is it, between 26 and 27?

A—There are some blue lines marked there in the tules, and the tules represented. This blue line should have been a little wider. There is the first, which was three feet deep, and then next comes that which was five feet deep.

1419 Mr. Flournoy. Q—That was the impassable one?

A—Yes, sir. The first is 3 feet deep. The second was 5 feet deep and a little wider, and then this impassable slough, where it was swimming water. I don't know how wide that was. I could not say. The water was over everything. The most westerly marking is the impassable one, and this I marked as a deep slough with heavy tules on this west bank. I did not cross it.

Q—Then as I understand you this plat is platted from your field notes?

A—Of these two points, yes, sir; and they represent

1420 correctly what is shown by the field notes. The blue represents where I struck the water.

Mr. McAllister. Q. You made that map?

A—Yes, sir. I hold no official position now except that of Curator of Mineralogy at the Academy of Sciences. I am not at present a County Surveyor. The office in connection with the Academy of Sciences pertains to minerals. It is the mineral part of the Academy. Its duties are, attending to all of the minerals that are received there, keeping them in order, and arranging them from different parts of the State.

1421 Cross-Examination of

Charles D. Gibbes.

By Mr. Haggin. Q—You say that this map correctly represents a survey here in T. 27 and 28, Range 22 and 23. Is this map made from your identical notes—your own field notes?

A—Yes, sir. I took my field notes and made that map 6.

Q—Is it shown here as accurately as your notes show your survey?

1422 A—Yes, sir. Just the same.

Q—Do your notes state that about sixty odd chains from the north-east corner of Section 4, T. 28, R. 22 E., you came to the bank of a slough. Am I correct?

A—No, sir. You have not got the distance right. The distance is 47 chains on the third mile.

Mr. Haggin—But I am speaking of Section 4.

A—That is between 25 and 26 is it not, or between 26 and 27?

Mr. McAllister—You had better look at your notes and be sure. Perhaps it would be better to be stated that so far as map No. 6 shows actual work by Mr.
1423 Gibbs, so far we offer it in evidence as of the facts; otherwise as a diagram. We first stated that we offered it altogether as a diagram.

Mr. Haggin—You stated it is a plat of actual surveys by you, and that it is correct, as your notes show?

A—You say T. 28; it is between T. 26 and 27. The northern boundary is shown in there; that is on the fourth mile.

Q—Very well, take that 26 and 27, you found, as you crossed it, the slough of a certain depth?

A—Yes, sir.

Q—Then you came to a deeper slough still?

1424 A—Yes, sir.

Q—Making three different sloughs through there?

A—Yes, sir.

Q—Did you find water pretty much over the tules through there?

A—It was over everything there, excepting over that little narrow slip.

Q—Excepting that little narrow slip on the eastern margin of the third slough?

A—At 720 I say, "Entered tule lands at 19 to stream of water."

Q—By "Entering tule land," you mean that the
1425 water was over this land?

A—A little scattering tule outside, a little wet, with water on it. The tules were all full of water outside of that.

Q—Now then, come down in your notes to the township line between 27 and 28. I mean the lines between townships 27 and 28?

A—Yes, sir, in R 22.

Mr. Haggin—In taking down my memoranda, I did not get the width of the slough which you have marked on this map.

A—I did not take it sir.

1426 Q—Then how did you plat this from your notes?

A—I ran to the slough. Here it is: "Wide deep slough." I did not give the width of it at all.

Q—But you mark a defined western bank on the plat?

A—The eastern—

Q—Also, a defined western bank on this plat?

A—Well, I could see the ground, and judge about the width of the slough.

Q—Then this is not a correct platting?

A—It is a correct plat, as far as my survey went.
1427 My survey only went to the slough.

Q—Then you don't pretend that this western bank of the slough is correct, on the plat from your notes?

A—I could not say whether it is 100 or 60 feet wide.

Q—Then your notes don't show whether the water extended beyond there or not; whether it was spread through the tules or not?

A—My notes only say "Heavy tule swamp west of slough."

Q—So far as your notes show, there was no defined bank on the western side?

1428 A—Yes; because I could not see the tules, and the tules don't grow in the slough.

Q—You could see—but I am asking you, sir, about your notes. Did your notes show that there was any channel—defined bank—on the western side of this slough, that I find platted there?

A—No, sir; they do not, because I didn't go there.

Q—So, then, your line here on the western bank of the slough is mere guess-work?

A—Just guessing the width of the water to where the high tules grow.

Q—So that you guess there is a slough, and just
1429 mark this down from mere guessing, not from any actual survey of that slough?

A—Well, I could not give the exact width of the slough. I say there is a large, deep slough, deep water running through there, a deep slough.

Q—But you made no actual survey of that slough there; you didn't take its width?

A—No.

Q—You don't know of your own knowledge where the western bank was?

A—Nothing more than I said before: that the slough has always been there, and the tules around it. I just
1430 guessed at the actual width,

Q—So, then, this plat, that part that you speak of, embraced in 27 and 28 S., R. 22 and 23, is in part made from your imagination; not from your notes?

A—As far as my survey went.

Q—Exactly; you have put down all that your survey shows; I appreciate that; also a little more besides?

A—Well, we are bound to show something, and to give as near as we can the width of it across, whether it is a slough or——

Q—[Interrupting]. Then you desired to show a
1431 slough there, so you made a western bank to it, as I understand, Mr. Gibbes?

A—Well, I sounded to see whether it was a slough or not. There is nothing in my notes to show where the western bank was.

Q—So, in that respect, it is your imagination that has placed this line on the western bank of the slough, and not your notes?

A—I don't know whether you would call it imagination or not. If you come to a place that is overflowed and see an open stream running by you, you would call it a slough. About so wide.

1432 Q—I want to know definitely, or have you answered it, whether that western bank was from an actual surver or not?

A—No, sir; it was not.

Q—Then the continuation of the west line between Townships 27 and 28, I understood you to say, was made from the other side of the slough. You came south and went around the body of tule lands, and then went up north to about opposite that point?

A—No, sir; we went higher than that. You have to commence north and run south. I had to go to the 6th Standard to do that work.

1433 Q—From the north corner of Section 4, you ran out a certain number of chains and found certain channels, until you came about 60 chains, more or less; 62 or 60 odd chains, I think you said.

A—[Int'g]. 63 chains.

Q—To the bank of a deep channel, or deep slough?

A—Yes, sir.

Q—That is a deep body of water there?

A—Yes, sir.

Q—Then did you trace the channel north or south?

A—No, sir.

Q—You merely found at that point that there was
1434 an abrupt bank?

A—That is all. It was swimming water. I didn't continue the line westward across the swamp land. That is what I was trying to do when I came to the deep slough, and found I could not cross. I stopped there and did not cross the body of swamp land.

Q—And then you went to the township line between 27 and 28. You then, from the range line between Ranges 22 and 23, worked west until you came to some point in that township, which is along the north line of Section 3?

1435 A—Which side are you talking of, the east or west side?

Q—The west side of the slough, I am speaking of, starting from the northeast quarter of Township 28, Range 22. You started and ran along in your survey some three and a half miles west?

A—Yes, sir.

Q—Until you came to a slough or abrupt bank of some sort?

A—Yes, sir.

Q—Did you go any further west than that?

A—No, sir; I put a stake and stopped there.

1436 Q—You put your meander stake and stopped there?
A—Yes, sir.

Q—Then I understand you worked on down; you were stopping at the margin of the swamp along here at these points as you came down?

A—Stopping there.

Q—As you were working down, running these different townships?

A—I camped at Goose Lake, and I started from there every day to go out and do this work, until I got to the 7th standard.

Q—When you came to the township line between
1437 Townships 28 and 29, the nearest township corner to this body of swamp land, and ran the township line westward, where did you start from?

A—I see you don't understand it. That is the 7th standard south; that is run by Von Schmidt. I run from the sixth down to the seventh, and didn't run any more.

Q—Then this township line between 27 and 28 was the last township line you ran?

A—South, yes sir.

Q—Twenty-seven and 28 was the last you ran, I
1438 understand you to say. You ran no section lines on the east side of this body of swamp land?

A—No, sir; let me explain. In running these lines, Von Schmidt goes ahead and runs out the standard lines; he runs this line down between 24 and 25; he takes in any township line he wants; he runs that down and gets 24 miles, and then runs east and west the standard line; then comes on and takes in this. You see his name mentioned down here, that he run down these lines to somewhere about the lake; takes in these and runs down to the eighth standard. We go after him then, and divide it up into townships.

1439 Q—You follow up the township lines?

A—Another surveyor comes after my work generally, and checks the work, so as to set anything right that I have done wrong.

Q—So all you did in this survey was to establish the township corners?

A—That is all, and the meander corners; I ran none of these section lines at all; I ran none of these section lines or meander lines through the swamp land.

Mr. McAllister. Q—You established the township lines, and what?

A—Meander corners.

1440 Q—To the swamp land?

A—To the swamp land.

Mr. HAGGIN. Q—That was for the purpose of establishing the township lines?

A—Yes, sir.

Q—Not for the purpose of meandering the swamp land?

A—I established those meander lines or posts, not for my use, but for the others that came afterwards. It is the end of my line, and they either start from that or close on it when they meander.

Q—How many meander posts would you establish
1441 in a township?

A—That depended upon where I struck the slough or swamp land. The swamp land we have nothing to do with. We stopped on the borders of the swamp land.

Q—Then these meander posts that you speak of were always either on the township or range line?

A—No, sir, not always; wherever I did work he would establish his, and I would establish mine. Whenever we would come to section this work off, we ran down section lines.

Q—I mean those you used to have placed there;
1442 those were always on your township or range lines?

A—Yes, sir.

Q—It was simply where the township or range lines struck the body of swamp land or water?

A—Or slough or river.

Q—Now, I understand you to say that after coming to the eastern bank of that body of swamp land here on the township line between Townships 27 and 28 south, you started and came around until you would get to the extreme end of this body of swamp lands; crossed over the slough there and went back northward
until you came opposite to the point where you had
1443 left it.

A—No, sir; I went back, I told you, to the sixth standard.

Q—You came away around here and went all the way up to the sixth standard?

A—Yes, sir.

Q—Then when you got up to the sixth standard, what did you do at the sixth standard?

A—How was I to know when I got opposite, unless I had some measurements to show?

Q—It was too wide for you to see your marks?

1444 A—Yes, sir; tules at least 15 or 20 feet high; when I got on the opposite side I could not tell— when I came opposite on the other side of the tules.

Q—So you came back to the standard line?

A—That was our instructions we had; to commence there and run south.

Q—Then you commenced at the standard line where?

A—I don't remember which one now. We would commence here and run down six miles, and run east six miles and put my meander post there.

Q—When you ran your range line down south from the sixth standard, and had your township line estab-
1445 lished from your range line, you would always stop, as I understand, at the western margin of this body of swamp lands?

A—Yes, sir.

Q—You didn't enter into the body of swamp lands at all?

A—No. Our instructions were to stop always on the margin of the swamp lands. The only reason I started this other line, I tried to get the line across, and never ran any lines across this body of swamp lands.

Q—The balance of this Exhibit No. 6 or map No. 6, outside of those Townships 27 and 28 South, Ranges
1446 22 and 23 East, was made by you not from the actual surveys of your own, but from the work of others?

A—What do you mean by the balance? On the west side I ran township lines and section lines as far as 28 south. These lines are my work.

Q—I say outside of these four townships embraced in Townships 27 and 28 south, Ranges 22 and 23 east, the balance of this map No. 6 is made not from your own surveys but from the work of somebody else?

A—Well, this township line I ran 24 up to Von Schmidt's line between 24 and 25; that is the only line.

1447 Q—Then all shown on this map south of Township 28 is made from the work of others; all that is shown south of Township 28 is from the 13 plats?

A—All south. There are 13 plats.

Q—Surveys made by others than yourself?

A—Yes, sir; I think it embraced these two, if I am not mistaken, and then there would be eleven that show down there.

Q—So that south of Township 28 you, of your own knowledge, know nothing of the country from actual survey?

1448 A—No; nothing from surveys; nothing more than when I traveled through there.

Re-direct Examination of

CHARLES D. GIBBS.

To Mr. HOUGHTON—I sectionized some land on the western side of the swamp land; only two townships. They were 27 South, 22 East, and 28 South, 22 East. That is all that I sectionized on this map. I sectionized both townships on the west side.

1449 Q—I understand that you prepared this map 6 from certified copies, which are in evidence; and where anything in that appears outside of these 13 is from the records on file in the U. S. Surveyor-General's Office?

A—Partly from that, and partly from other maps of Buena Vista Lake. I just extended it around by other surveys.

Q—What surveys?

A—Shown by the Government surveys; but I did not go to the office to get them. I had them in my room.

Q—You said that you measured the slough which you came across on the township line between Townships 27
1450 and 28. What was the depth of it?

A—To the best of my recollection, there was nothing there to measure the slough with, except large tules, and I think I made the boys cut a tule 17 or 18 feet high—a very long tule—and drop it down in there. It was 12 or 15 feet, as near as I can recollect.

Re-Cross-Examination of

CHARLES D. GIBBS.

Mr. HAGGIN. Q—You stated that portions of that
1451 map, showing the lake, was made from other diagrams or other plats in your office. Where did you get those?

A—I had some printed diagrams showing the lakes and the swamp lands and the Government surveys at the edge of the swamp lands.

Q—What printed diagrams? What were they in?

A—I don't recollect now; sheets just like that sheet up there. I could not say whether that map is correct. I only surveyed the south part.

Q—I only ask you about the lakes. You don't know whether that is correct or not?

1452 A—Buena Vista and Kern lakes, you say?

Q—That portion you took from the printed maps. You don't know whether the printed maps are correct or not, yourself?

A—No, sir.

P. S. JEWETT,

Called as a witness for the plaintiffs, being sworn, testified:

To Mr. HOUGHTON—I reside in Kern County. I have
1453 been farming. About the middle of March, 1881, I was at work on the Calloway Canal, right at the head.

[Testimony objected to by defendant, as being subsequent to the commencement of this suit. Objection overruled. Defendant excepts.]

I was working with my team, scraping up a sand levee, helping Mr. Roberts. I was scraping up a sand levee, to turn water into the head of the ditch; to turn it towards the head-gate, in other words; to get water into the Calloway.

Q—Was there a wing-dam built from the head of that dam out into Kern River?

1454 A—There was when I began work there. I could not tell exactly what distance it was built out. I believe I began—as near as I can remember, the first of my work was close to the middle of the river, if I am not mistaken.

Q—You commenced close to the middle of the river?

A—I think that was the first that I did.

Q—What was the condition of the river between the point where you commenced and the head of the ditch?

A—I think the condition of it, as near as I can remember, it was going down into the Calloway, as I
1455 remember, the water was; when I commenced in the middle of the river the dam was extended out that far.

Q—Then, how far? While you were at work there, how far was it extended? How much further did you extend it?

A—Well, I could not tell you exactly how far. We worked there four or five different days scraping. How far we extended it I couldn't tell. Sometimes we would get it up pretty high, up the river, and then again it would wash down, and how far the distance was I didn't measure it, and I can't say. The Calloway ditch is on the north side of the river. I think we closed that dam

1456 into the head near the south side, within about seventy-five or eighty feet. I don't know the exact distance.

Q—Did you ever see that dam nearer the south side than seventy or eighty feet?

A—Well, that portion of it was that close. The sand that we scraped; the sand levee that we scraped was within that distance. That is what I was speaking of.

Q—Didn't you ever see and help to build a wing-dam to throw water into that canal; that Calloway canal that extended nearer to the south bank than seventy-five feet?

A—Yes, sir; we began on the opposite side from that,
1457 and began with trees, bushes or trees, hay and sand bags. We commenced on the south side, and we run that out, I think; I wouldn't be positive of distance, but we run, I think, probably about thirty feet.

Q—How much space was there between the wing-dam that you extended from the north side to the one that you extended from the south?

A—Before we quit it we hauled a tree, in that extended quite across—clear across the river. The water still ran under that.

Q—The wing-dam, then, was extended clear across the
1458 river?

A—That was the fix that it was in; just in that shape; I could not tell how long it remained in that condition, I quit that night and left. It was just hanging on the bulk-head as we quit it; when we left there at night.

Q—When you threw those trees in there, what was the distance between the two banks, where you had extended them out; that wing dam?

A—Well, I could not tell you exactly the distance; we hauled a couple of trees across there and they went from one bank to another, and put in brush on the sand levee that we had run up. There was a bulk-head there, and
1459 we lodged the trees against that, and we put in brush in around that, and the water still——

Mr. Garber—Lodged the trees against what?

A—Against the bulk-head. I think probably the trees were about thirty feet long, as near as I can get at it. I won't be positive about it. After we had put the trees in we put in brush in under that. The purpose was I suppose, to stop the water and turn it down through the head-gate into the canal. That was what we were driving at, at least that was what I was. It was finished that evening. I could not tell what day of

1460 the month that was. We worked there until very nigh sun-down; if I remember right, and then we drove about a mile to Mr. Roberts' house, and it was sun-down, if I remember right, and we got to the house after we throwed in the last load of sacks. That was the condition I left it in, and I don't know that I have been back there since then.

Q—Did that wing-dam, after the trees were thrown across, and the brush thrown in there, throw all the water into the Calloway ?

A—No, sir; It didn't.

Q—How much was there running down the river ?

1461 A—Well, I couldn't tell you how much. I have no idea, because I never measured the water in the river to state how much there was going down. It was running under those trees, though.

Q—Was there much or little running down there ?

A—Well, I couldn't say anything about how much, because, as I told you before, I don't know anything about the quantity of water there was.

CROSS-EXAMINATION.

BY MR. HAGGIN. Q—Mr. Jewett, you stated that 1462 there was a tree put out. Do I understand you to mean that it was from the end of one wing-dam to the other right across the stream ?

A—The end of where we built the sand bags and brush, it lodged against the bulk-head, we had on the opposite side; the butt of the trees did.

Q—How long did that tree remain there ?

A—It kept cutting out and cutting out, but it still hung there a little when I left—how much I don't know. It was hanging on the south side, and extended clear across to the other head when I left. It had washed clear down, and was just about to give way.

1463 Q—Then you left just at the moment when it was about to give way ?

A—Well, it was in that period of giving way. It was still cutting. It would give way against morning if it didn't do so before. I could not tell how deep the water was between those two bulk-heads—between the dam and the bulk-heads. I wasn't into it and didn't measure it. I am satisfied it was over any man's head; it was tolerably deep there. It was washing the bulk-head away. It was a pretty strong current there. I could not tell how much water was running by. I could not say

1464 whether there was a large quantity or not going down the stream. There was quite a stream, but whether you would call it a good deal or not, I don't know. I have been familiar with Kern River for the last four years, but not before that. I have never measured any water in the river since I have been in the State. I have been on the head gate of the Calloway Canal. I could not say what section it is on. I think it would be three-quarters of a mile or so south of Mr. Roberts' house, and has always been given to me as the Calloway head-gate. I know where the railroad bridge is; it is some sixty or eighty rods east of the railroad bridge, but I could not
1465 tell you exactly the number. It would be north of east of the bridge.

Q—You say that the purpose of that wing-dam was to turn water into the Calloway Canal, you suppose. How do you know?

A—I know it, because I helped to turn it in. That is the point I am speaking of—east of the railroad bridge. I never followed the water down from that point. I just crossed the Calloway to my work and back. I was living, I think, about six or seven miles, I think, northwest from Mr. Robert's, on the north side of the river.
1466 In going to work, I crossed right at the head-gate; above the head-gate in going to my work and back, and right east of the railroad bridge. I never went at that time lower down the canal. I was there attending to my work; I was there to work.

RE-DIRECT EXAMINATION.

By Mr. HOUGHTON—The head-gate, I believe, on the Calloway is higher up the river than the railroad bridge; above the railroad bridge. I don't know exactly the lines at that point. I would call it east. When I
1467 crossed above the head of the Calloway, I waded sometimes and sometimes rode on my horse. I would probably cross within six or eight rods of the head-gate.

Q—Would the water which this wing-dam turned run down through the head-gate where you crossed?

A—Yes, sir; that is where it was going.

Q. What were your instructions, Mr. Jewett, when you were throwing that wing-dam and putting the trees in to close that gap?

A—Well, I was to turn the water down the ditch; that was the object of the work.

1468 Q—Were the instructions to turn all the water of the river down that ditch?

A—I don't think it was exactly all of it.

Q—What were your instructions?

A—To turn in enough—sufficient for the wants of the ditch; that was all. Mr. Roberts was there working, and I was following him up He was working with us when those trees were thrown across.

RE-CROSS-EXAMINATION.

By Mr. HAGGIN. Q—You say that this head-gate was
1469 a few rods above the railroad bridge, and that at that time that you did not go down the canal any further. You don't know, then, what became of the water that went in that canal, yourself?

A—In those years I did not. My instructions from Mr. Roberts were to help do that work. He said: "You will come up and help me turn the water into the Calloway; yourself and four horses." That is, as near as I can remember what he said. The Roberts I speak of is E. M. Roberts, who has been a witness in this case.

1470 GEORGE DAVIDSON,

Called as a witness for the plaintiffs, being sworn, testified:

By Mr. MCALLISTER—With the exception of being at home during the rebellion, I have been in California since 1850. I am at present assistant in the United States Coast and Geodetic Survey. I have held that position for nearly 30 years. I have been engaged in various works of surveying in California. I commenced work in 1850, about.

1471 Q—Have you ever been connected with the U. S. Commissioners of Irrigation?

A—I was appointed by the President one of the U. S. Commissioners of Irrigation in 1873. We finished the work that season, say from May to the end of the season, and made a report in February, 1874. Since that time I have paid a great deal of attention to irrigation. I was appointed—was instructed by the Superintendent of the Coast Survey to make an examination of the irrigation of Japan, China, India, Egypt, Italy and such other parts of Continental Europe as I had time to accomplish.

1472 Q—You performed that service after visiting those countries, I believe?

A—I did, sir. I am familiar with the water system of California.

Q—Are you familiar with the source and course of Kern River, Professor?

A—I am familiar with its general features. It rises in the Sierra Nevadas.

Q—What is its general course from that point until it reaches Bakersfield?

A—West south-west, about twelve miles, I think. I have been at it where it breaks from the mountains, and
1473 down to Bakersfield. I visited Kern River during the years '80 and '81, on two occasions; once in December. 1880, and on the present occasion. The present course of Kern River—its general course—from Bakersfield is west southwest into Buena Vista Slough.

Q—What is the character of this valley through which Kern River runs? How is this valley formed?

A—Kern River is at the head of what we call, in the U. S. Commissioners' Report, a delta, which is formed by the debris brought down by the Kern River. It has spread out, fan like, from a direction east of south to a
1474 west southwest direction, and terminating on the borders of the lakes Kern and Buena Vista. The valley through which Kern River runs lies between the Sierra Nevadas on the northeast and the coast range of mountains on the southwest.

Q—What is the broader side of the valley through which Kern River runs—the eastern or western side?

A—The eastern side; the northeastern side. On the southeastern side the Buena Vista hills come right close to Buena Vista Slough. The river does not run in the centre of the valley; it runs through the western part of the trough, forming a part of the great valley of Cali-
1475 fornia.

Q—Now, after Kern River has discharged itself in the way you have described and the course you have described, to Buena Vista Slough, what is the next course those waters take—the next general course?

A—After entering Buena Vista Slough its general course is to the north northwest.

Q—How in the direction of Tulare Lake?

A—In the line of the course of depressions of the valley of California, through Tulare Lake.

Q—Is there through that part of the valley, in the

1476 northwest direction of Tulare Lake, anything like a trough in the valley ?

A—There is what we have designated a trough in that valley, giving a line of drainage through that valley; and the various rivers will all go in that trough. This wnole valley, from its northern point, drains to the north northwest and into the San Joaquin, or, as you may say, it sheds or drains into that trough, and then runs north northwest. I have examined what is called the delta of Kern River.

Q—Did you make an examination, at your present visit of this delta, the way the water flows from Kern
1477 River to Buena Vista Slough ?

A—Yes, sir; I have been down to Buena Vista Slough.

Q—Can you state now into how many forks the Kern River at this time flows; by and through how many forks it flows in to Buena Vista Slough ?

A—It is now flowing through one fork, known as the South Fork. There is another fork, which is now empty, except a small amount of back water, which enters it through Buena Vista Slough.

Q—Did you make any special observation as to the
1478 course of the water after it reaches this delta or New River? What course it takes from that point?

A—At Buena Vista Slough a part of the water is going to the southward into Buena Vista Lake, and a part of it is going to the north northwest, through Buena Vista Slough. That applies to the present water, that is running down the south fork of New River.

Q—Did you at your present visit make a measurement of the water, for the purpose of ascertaining what proportion of it flows northward and what proportion flows southward ?

A—I did. I selected a part of Buena Vista Slough
1479 having fairly uniform banks, and measured three points, or cross sections, nearly one hundred feet apart, and determined the velocity of the stream by a series of observation through the centre and through the two sides of the channel. I then computed the amount of water, the velocity of the water passing through there, and how many cubic feet passed in one second. I obtained the number of cubic feet as a little over 300 per second to the north northwest.

Q—How much passing to the south in the direction of Buena Vista Lake?

1480 A—Then I went below the causeway that has been broken through. The water is there passing through two head-gates, and through a part of the torn causeway at Cole's bridge. And I followed nearly almost identically the same system, and I found there was a little over 400 cubic feet passing per second towards Buena Vista Lake, and there were a little over 300 feet going northward. There was a small quantity of water in the north fork, which I examined carefully, but I found it was back-water, and apparently the only discharge of Kern River is through the south fork, and the waters divide in the way and in the proportions I have described. The elevation of
1481 Bakersfield above the sea is 400 feet. I determined it in 1877. The elevation of Kern and Buena Vista Lakes above the level of the sea is 290 feet.

Q—Are both of those lakes about the same elevation—Kern Lake and Buena Vista Lake?

A—That would depend upon the condition of the water flowing into them. If the water now going southward through Buena Vista Slough would be sufficient to fill both of those lakes and then cease flowing, they would have the same level. The grade or decent from Bakersfield to Kern Lake would be about seven and a
1482 half feet per mile; and from Bakersfield to Buena Vista Lake would be about six feet per mile.

Q—Do you know the grade from the confluence of Buena Vista Slough with Buena Vista Lake to the mouth of the San Joaquin River?

A—About 290 feet.

Q—Did you make an examination some years previous of these desert lands?

A—Yes, sir; in connection with Gen. Alexander, and Col. Mendell, who had been the other two Commissioners of Irrigation, we made an examination of the desert lands at the request of Messrs. Haggin & Carr, in November,
1483 1877.

Q—Did you, in the course of that examination, go through the desert land which the Calloway canal traverses?

A—Under the Calloway Canal, along the line of that canal, a few miles up to where they proposed to build head works; that was in November, 1877. I think at that time the Calloway Canal had been constructed ten miles from Kern River. That would be an estimate. There was no water in the canal at that time.

Q—When Kern and Buena Vista Lakes are filled by

1484 this flow of water from Kern River, through Buena Vista Slough, filled to have full banks, where will the water then flow?

A—The water will then flow to the north-northwest, and if there was a supply it would increase the height. But if the supply north was decreased, it would then afford the means of draining the lakes and all go to the north-northwest.

Q—Is there any other outlet there that you know of except to the north-northwest from Buena Vista Slough?

A—No, sir.

Q—What is the grade from Buena Vista Lake to
1485 Tulare Lake, Professor?

A—Nearly 100 feet. You mean by the grade, the difference of levels? The width of the valley, where the Kern River comes into it, between the Coast Range and the foot of the Sierra Nevadas, is about thirty-six or forty miles in round numbers. The flow of water from this Kern River Valley is west southwest until it reaches these two lakes or connecting streams, then the flow of water is north northwest.

Q—Do you know of any other source of supply that the Kern and Buena Vista Lakes have other than Kern River?

1486

A—I do not. That is, in wet seasons there might be a small amount supplied from the San Emidio Cañon, from Tejon Cañon and from the Tehachepe. That would be when there is a large flow. When we passed through the San Emidio Cañon in 1873, we crossed no sign of water at all. The distance from Buena Vista Lake to Tulare Lake is about 52 or 3 miles in a straight line.

Cross-examination of

GEORGE DAVIDSON.

1487

By Mr. GARBER. Q—Is this the report that you made of that desert land that you speak of [showing a book]?

A—Yes, sir.

Q—You know this. That is correct, is it?

A—Yes, sir. I said that the difference of altitude between Buena Vista Lake and Tulare Lake is something less than 100 feet. I think it is over 90. I didn't measure it at Tulare. I have never determined it myself at Tulare.

1488 Mr. GARBER—I move to strike out that testimony as hearsay; referring to the difference of elevation between Tulare and Buena Vista Lakes.

The motion is granted.

Q—Are you positive about there being no other source of water supply to Kern and Buena Vista Lakes than the Kern River?

A—I said no other visible sources of supply.

Q—Are you positive about that?

A—Except those small cañons.

Q—You have made an examination, so that you know?

1489 A—Yes, sir.

Q—You can state positively that there are no other sources of water supply for those lakes except the Kern River?

A—There may be those little streams that I know not the name of, coming in here [pointing to the map].

Q—To what extent did you examine?

A—I have been to the Tehachepe and the San Emedio, in Tehachepe three or four times, and I have gone around the lakes. I have gone around them and on Kern Lake. I have not been on the further side of Buena Vista Lake.

1490 Q—Can you be positive that there are no other sources of supply except the Kern River?

A—I say that the other sources of supply are not supplies that amount to anything at all. Water from the Tehachepe, from the Tejon and from the San Emidio Cañon. There is no other visible source of supply that have any comparison at all with the Kern River in amount.

Q—But there may be other sources of supply that do not have a comparison to it in amount?

A—There may be.

1491 Q—You won't undertake to speak about that?

A—I won't swear to it.

Q—You mean that there are none which bear a comparison to Kern River?

A—None at all; even those I mentioned—the San Emidio Cañon, the Tehachepe and the Tejon bear a very small comparison. I know nothing of any springs. I cannot say that there are none. I do not know whether there are or not.

Q—Would you undertake to say how long the water of Buena Vista Lake, for instance, the bottom of it has been covered by this stream?

1492 A—No, sir. You mean how long the waters of Kern and Buena Vista sloughs have been in Buena Vista Lake?

Q—How long has this river emptied into that lake?

A—I cannot say, sir.

Q—From all you know, it could have had a different course and run somewhere else for some time?

A—We were so informed when we were here as United States Commissioners. That is my only information.

Q—I want to know whether you could tell from your examination whether that has always been the source
1493 of supply?

A—From our examination there were apparently other old channels that would lead the water into the lakes or the sloughs connecting them.

Q—Can you undertake to say from your examination that there was not a time when the water of Kern River did not go into that lake at all, Buena Vista Lake?

A—There may have been a time, and there may come a time, when the waters of Kern River may be diverted still further to the west. I am not speaking of anything artificial.

Q—By the operation of natural causes, might there
1494 not have been a time when none of that water went into Buena Vista Lake?

A—Of course, I cannot speak of my own knowledge. I have made an examination, and it shows that there have been times when part of the water has gone further to the west. I made the examination in 1877.

Q—Where did it go then?

A—It went westerly in what is now called Goose Lake Slough.

Q—In 1877?

A—Yes, sir. No, sir; it didn't go there then. I say
1495 I visited the locality in 1877.

Q—And all the waters of Kern River ran there then?

A—Apparently not; for when I came to the banks of Kern River the banks were four feet high at the mouth of what is called Goose Lake Slough; so then the river would have to rise four feet to get into the slough at all. The river was dry there at that time.

Q—What I want to get at is whether or not you can tell—I do not know whether it is possible for any body to tell whether there has been a time when none of the waters of Kern River ever ran into Buena Vista Lake at all?

1496 A—I think not, because the grade of the country would be against it.

Q—Do you think it impossible that there ever was such a time?

A—I think not.

Q—Do you pronounce it a physical impossibility.

A—I should think it was almost physically impossible from my examination of the country and my knowledge of the country.

Q—That there ever could have been a time when none of the water of Kern River ran into Buena Vista Lake?

1497 A—No; I have not said that. I said that in my opinion I cannot see how it is possible that there was a time when they would not.

Q—You say that it is a physical impossibility that there ever could have been a time when none of the waters of Kern River would have gone into Buena Vista Slough?

A—We misunderstand each other. I think it has always been the line of drainage down into Kern Lake and Buena Vista Lake. What I am trying to say is this: that they must always have gone into Kern and Buena Vista Lakes except there was some exceptional
1498 physical reason why they were diverted temporarily further to the west.

Q—Artificially?

A—It might be artificially or naturally. Understand me, I am not catching on any words.

Q—Nor am I. I do not want to do it.

The WITNESS—I mean this as an engineer: I might block up the channel of the river and throw its waters in another direction.

Q—Can you tell positively whether there could have been a time when none of the waters of Kern River
1499 ever went into Buena Vista Lake at all?

A—When none of the waters went in there; therefore you mean they must have gone further westward?

Q—Yes; southwest.

A—I think it impossible.

Q—If you were to find growing in the bottom of Buena Vista Lake, or standing there, the stumps of trees, several feet thick, which have grown up from the bottom of that Lake, would that alter your opinion?

A—No, sir. Because I can readily imagine that the trough of the valley might have been, we will say, nearer the middle of the whole val-

1500 ley, and as the wash is greater from the western side, the Sierra Nevada has more material to bring down and more water to bring it down, it will naturally force its way over and fill in the trough, and form lakes on the further side of the trough. And, therefore, on the further side there may have been trees growing up there above the line of drainage, and when this mass of material, forming what is the delta of Kern River, was forced further, and the mass from the Sierra Nevadas was forced across the whole valley in that direction, then the line of drainage was thrown right over those lines of trees.
1501 The bed of the line of drainage may have shifted, and there is a bare possibility, if you will allow me, that there may have been no lakes at all thousands or tens of thousands of years ago. It may simply have been a line of drainage. The difference of elevation between Kern Lake and Buena Vista Lake depends upon the stage of the water in the way of supply.

Q—Is there any difference in the level of the bottom of these lakes?

A—I don't know the depth of Buena Vista Lake. I know the depth of water in Kern Lake in May, 1873. In the last week of May, 1873, the depth of the water
1502 in the middle of the Lake was 16⅔ feet. I don't know what is the grade from Kern Lake to Buena Vista Lake at the bottom.

Q—How did you make the measurement of that water flowing down into Buena Vista Lake?

A—I do not know the grade of the connecting channel connecting the lakes. In making the measurement of the water in Buena Vista Slough I selected a part of the stream with even banks. It was about a mile north of the north fork of the Kern River, and a mile northward of the causeway, as you call it, or
1503 levee at Cole's crossing. To measure the water going into the lakes I went about a third of a mile southward of that causeway at Cole's bridge till I got fairly even banks and a moderately even flowing stream. I placed three stakes across the particular portion that I had selected, and below that at a hundred feet, I placed three more stakes, driven in the water, and measured the distance and properly located them; then I sent down floats sunk below the surface with the top standing up, from the upper to the lower stakes, and determined the velocity of the water. I measured with a leveling rod the depth of the water across the slough,

1504 and formed the cross section, and then computed from the given velocity and the cross section the amount of water passing through per second. I made three measurements of the depth of the water with a rod at each place, with an estimate at the extreme edge where we struck the levels, and half way between each of them, so as to get as reasonably fair condition as I did of that going north.

Q—Have you preserved the notes?

A—I had the records; I have it not here. I can give you the figures in memorandum here. I could not give the measurements. I will say this, that the
1505 measurements for time were so accurate that on one of the lines the range for 3 or 4 determinations was a half a second, and on the other, one second only, so that the per centage must be very close to the truth. I made the measurements for the water that went into Buena Vista Lake, yesterday, at between 3 and 4 o'clock, and made the measurement of the water flowing north, yesterday, about two hours earlier. The measurements were made practically at the same time.

Mr. GARBER — I wish to offer this in evidence. [Showing a book containing the report of Davidson, Mendell and Alexander], while he is in the stand?

1506 Mr. McALLISTER—I have no objection to it, provided we are to use the same book when the witnesses are on the stand.

Mr. GARBER—I only want to use the part I proved.

Mr. McALLISTER—Certain other parts we want to prove.

Mr. GARBER—I only offer this because he states that it is a correct report which he made himself.

The WITNESS—I did not make that myself. I signed it, my recollection is, the report was made by Mr. Mendell and read to me. It contains to the best of my knowledge at that time what we knew; to the best of
1507 my knowledge it contained the facts, as far as we knew them?

[The report is offered in evidence.]

Mr. McALLISTER—We object to it, except under the stipulation that we may use it, provided the witnesses to whom we offer it will say it is correct.

Mr. GARBER—We don't make any stipulation about it. The witness states that he made the report stating those facts concerning the country which he visited. I offer it, having proved its correctness. I offer the report in evidence.

1508 Mr. McAllister—Our objection is, that you cannot produce a copy, of it if it is objected to when there is an original in existence.

Mr. Garber—I don't introduce it as a copy. I simply introduce the statements here because the witness has stated, as a part of his cross-examination, that they are correct.

Mr. McAllister—But that is evidently a copy. It is a printed book.

The Court—The printed book is evidently a copy, but the witness states that it is correct.

The Witness—I have not read it. I believe it is
1509 correct. I have not the original with me.

Mr. Garber—You can tell now by comparing it.

Mr. McAllister—We object to it being shown to the witness. We are perfectly willing, and we think it is fair that both sides should use this book. In fact we are anxious to use it. We don't think that they expect to use it, and then prevent us from using it. Of course there is nothing in that report so far as I understand that will reflect upon the Professor's testimony. But we don't want them to use it, unless we have the privilege of using it in the same way. I am
1510 willing to stipulate that it shall be used to any extent, provided we shall have the same privilege.

Mr. Garber—I think it is time enough to settle matters as they come up. We have proved by Mr. Davidson in cross-examination that the statements in this book are correct as to matters of fact. We now offer them as a part of his cross-examination, he having shown that the statements are correct.

The Court—For what purpose is it offered?

Mr. Garber—As a part of his testimony, explaining his testimony in chief.

The Witness—I would like to make a remark about
1511 that. You will understand that was on a special question of arid lands, and therefore we paid more particular attention to the question of settling that for Messrs. Haggin and Carr, as to whether those were arid lands or not; because he had asked us in his letter and had asked me in conversation.

Mr. McAllister (interrupting)—I want to stop you; you might involve me. We want to object to this being shown to the witness at all, as the other side won't make the stipulation that we seek. We object to the copy being shown to the witness. The witness says he has not examined it; he has no doubt it is a

1512 correct copy; I have no doubt it is, myself. But the rule is, you must show the original paper to the witness; you cannot show him a copy of a paper. We had that question up here and had it disposed of by your Honor at a previous stage of this case.

Mr. GARBER—I don't understand it was disposed of.

The COURT—If he offers it for the purpose of contradicting anything he might have testified to, it might be admissible, as he states that it is correct. But I don't understand for what purpose, as yet, it is introduced.

Mr. GARBER—I simply offer this as a part of his
1513 cross-examination. He has stated in the direct examination that he went there for the purpose of making a report, and he made a report. I asked him if this is that report, and I offer it as part of his testimony, to complete his testimony, to show what that report was. They having brought it out that he went there to make that report, I wish to show what that report was.

Mr. MCALLISTER. There is no objection to that at all if the report is produced. But in reference to private writings, the original must always be produced. And the original is not produced. That is our objection to this paper being shown to the witness. The
1514 original writing must be produced.

[Reads from the Code Section 1819.]

We had the same question up here on this map.

The COURT. It was not ruled upon.

Mr. FLOURNOY. Mr. McAllister raised the question on the map, and I withdrew the question—withdrew the witness for the purpose of making further inquiry.

The objection is overruled and the plaintiff except

Mr. Garber reads in evidence the report, which is as follows:

SAN FRANCISCO, CAL., November 16th, 1877.

1515 J. B. HAGGIN, Esq., San Francisco, Cal.

Sir: We have received your letter of the 6th inst., in which you request us to visit certain lands in Kern County in this State, "make a critical examination of them; obtain further statistics as to rainfall, and report whether, in the light to be obtained from this subsequent examination, you find any reason to change the views expressed by you in your report to Congress of February 20, 1874."

You also ask us, "To report at the same time, whether in your opinion, these lands are or are not of that char-

1516 acter, that by reason of lack of rain, are made desert and incapable of successful cultivation unless irrigated artificially."

In compliance with this request, the undersigned visited a portion of Kern County, as hereinafter specified, and spent four days in driving over these lands; in investigating the character of the soil and the circumstances which affect the cultivation of agricultural crops in this region.

The territorial extent of our examinations is shown by the accompanying table of Townships, parts of each we visited and traveled over. We were thus enabled
1517 to form clear opinions of the character of all these lands:

Township 27 S. of Ranges 24, 25, 26, 27 and 28 east;
Township 28 S. of Ranges 24, 25, 26, 27 and 28 east;
Township 29 S. of Ranges 24, 25, 26, 27 and 28 east;
Township 30 S. of Ranges 24, 25, 26, 27 and 28 east;
Township 31 S. of Ranges 24, 25, 26 and 27 east.

A short distance above the village of Bakersfield, the Kern River emerges from the foot hills and enters upon a sandy plain, which may properly be called its delta.

1518 While in the foot-hills the river runs in a single and unchanging channel, at the head of its delta, where it is no longer held on either side by unyielding banks, it separates into several channels or sloughs. Still lower, on these branches, a further subdivision of these channels into minor sloughs takes place, so that a large district, lying south and southwest of Bakersfield, is intersected by many natural channels, which, in high stages of the river, are filled with water.

This plain or delta is low and sandy. This district is known as "Kern Island," and it embraces the whole or large parts of Township 30 S., of Ranges 25, 26, 27
1519 and 28 East; Township 31 S., of Ranges 25, 26, 27 and 28 East; and small portions of Township 29 S., Ranges 25, 26, 27 and 28 East.

The remaining townships which we visited, as well as parts of those last mentioned, are not intersected by sloughs; they are higher and cannot be regarded as delta lands.

This description naturally divides these lands into a classification of two heads, namely, delta and uplands.

A further analysis might result in other classifications relating to the character and elements of the soil; the presence or absence of alkali; the existence or ab-

1520 sence of a clay layer within a few feet of the surface; all of which are important in their way, but for the purposes of the present investigation, it is not deemed necessary to pursue inquiry further in this direction.

The purpose which we had in view was to come to a conclusion in our own minds, whether these lands are desert lands in the sense in which the qualifying word is used in the 2d section of the Act of Congress providing for the sale of desert land in certain States and Territories, approved March 3, 1877, which says, "that all lands, exclusive of timber lands and mineral lands, which will not, without irrigation, produce some agri-
1521 cultural crop, shall be deemed desert land within the meaning of this Act."

The undersigned, while acting as Commissioners of Irrigation under the Act of Congress, approved March 3, 1873, visited this region in the month of May, 1873.

We passed from Tipton to Bakersfield, a distance of about 50 miles, by stage, and passing to the south of Bakersfield, we visited Kern Lake, and extended our examination to the San Emedio cañon.

Between Tipton and Bakersfield, we passed no houses except the stage stations, three or four in number, nor
1522 were there any evidences of cultivation within the radius of our vision, throughout this journey from Tipton to San Emidio, except in a limited district in the vicinity of Bakersfield, where irrigation was practiced.

The country was covered with a scanty crop of wild grass suitable for pasturage. In order to illustrate our opinion at this time, we think it proper to make quotations from our report on the irrigation of the San Joaquin, Tulare and Sacramento Valleys, published as House of Representatives Executive Document 290, XLIII Congress, 1st session.

1523 When comparing the relative rainfall of the northern part of the great valley with the southwestern extremity thereof, in the vicinity of Kern Lake, we said that "this latter section is the driest region in the whole valley, and probably only half the rain falls there that falls about the vicinity of Bakersfield." (p. 11).

At that time the only rainfall data we could gather near Bakersfield was for the year 1870-71, when 2.4 inches fell at Modesto. (p. 14).

In 1870-71 and 1872-73, the rainfall at Visalia, farther north, was respectively 6.8 and 7.2 inches, and the crops were failures. (p. 11).

1524 "The rainfall of the years 1868-69, 1869-70 and 1870-71 was marked as not only below the average over the whole extent of the country, but throughout the southern section, south of Monterey, and in the southern part of the great valley, the rainfall was so limited that neither grain nor grass grew. Hundreds of farms were abandoned, and stockmen were compelled to drive their cattle, horses and sheep to the gulches of the mountains, not only for food but for water. (p. 14).

"From Tulare Lake to San Diego the country was nearly desolate, and in March, 1871, the usual season
1525 when the crops should be luxuriant, not a blade of grass was to be seen over the great plains and through the valleys, which are richly covered after favorable rains. Hundreds of thousands of sheep, horses and cattle were lost by starvation. (p. 15).

"The practical deduction of the farmers in the southern part of the great valley is that they can sesure about two crops in five seasons; but this is still reduced in the extreme southern section, where we traversed ten and twenty miles at a time without a cabin to indicate a claim, yet where the land was remarkably good. The great drought of the seasons
1526 1862–63, 1863–64, when only 13.6 and 10.1 inches of rain fell at San Francisco, was not so severely felt by the State, because the population was much smaller, and grain crops were not then so largely cultivated; but a recurrence of such years at the present time, or in the future, would be accompanied by the most disastrous results to the prosperity of the country, unless artificial means be adopted to secure the use of the waters from the streams," (p. 15).

"In 1850 only 7.0 inches of rain fell at San Francisco; such a season now, without irrigation, would
1527 produce a famine," (p. 15).

We called attention to the very large area to be irrigated from the Kern River and the smaller streams, and gave the warning that the water must be economically distributed, (p. 22).

We have also stated that even the scant rainfall of this section did not do its full duty for the crops. "During May, 1873, we experienced a temperature of 130 degrees in the sun between Bakersfield and San Emidio Cañon, and for months the temperature in the sun ranges over 100 degrees. This great heat, accompanied by excessive dryness of the atmosphere and

1528 months of cloudless sky, evaporates every particle of moisture from the ground, and produces conditions which the farmers of the Atlantic States can hardly comprehend. It also demands a larger supply of water for maturing a crop than would be the case if the ground were moist when the proper season of plowing and sowing arrived," (p. 12).

"Throughout the valley at mid-day, in the middle of summer, the temperature very closely approximates 100 degrees in the shade, and is frequently above that," (p. 17).

And among the conclusions which we reached will be
1529 found the following:

"4th. That irrigation is much needed, particularly in the San Joaquin and Tulare Valleys. The productions of these valleys could be increased many fold by comprehensive system of irrigation. The value of the irrigable land and of the revenue derived from it both by the State and by the people, will be increased in the same ratio," (p. 77).

"21st. That the relation of the United States to the irrigation of California is for the most part indirect, but that—in the southern end of the valley, between Visalia and Bakersfield, and south of this town—it is
1530 believed that the United States own many thousand acres of land which are capable of irrigation; that most of this land cannot be cultivated under existing circumstances; that it has no value except for pasturage during part of the year; that, if irrigated, its value would be increased many fold; that under these circumstances it may be a question whether the United States ought not in some way to encourage the irrigation of these lands," (p. 80).

These extracts from our report clearly indicate the opinions which we held at that time.

1531 Our second visit to this locality made us familiar with the changes which had taken place in a little more than four years.

Instead of one or two canals, as in 1873, in 1877 we found no less than twenty-seven canals, completed or in various stages of construction, and ready or nearly ready to take water from the river for the purpose of irrigating the lands commanded by them.

These lands are nearly all within the district of the delta or island before described. Several canals are, however, under construction for the purpose of irrigating the uplands.

1532 The aggregate capacity of these canals is probably fully up to the flowage of the river in a good stage of water, and several times its flowage in average years between the months of July and December.

Under such canals as were completed we saw fine farms under cultivation, and producing large crops of grain and alfalfa, but we have seen no place where a crop is raised without the aid of water transported to the ground by natural or artificial channels, and distributed either by the usual process of irrigation, by seepage, or, occasionally, by natural overflow.

Above the canals, within the radius of our examina-
1533 tions, we have failed to see a sign of successful cultivation, or, indeed, of an attempt at cultivation.

The only occupants of this land are the nomadic sheep herders, who manage to secure a sustenance for their flocks during a part of the year.

At present, this district above the canals, when not covered with sagebrush, is perfectly bare of vegetation, and it is hardly possible to find a drier landscape than this desolate country presents.

We are, therefore confirmed in the views which were expressed in our irrigation report, and we feel sure that there is no chance of error in stating that all the
1534 land under consideration outside of Kern Island is perfectly worthless for purposes of cultivation without the aid of irrigation.

The same statement may be made with reference to the land embraced within the limits of Kern Island, with the qualification that there are exceptional strips of small area which lie upon the water-courses and receive from them by seepage or overflow a certain quantity of water.

Even the lands classed as overflowed lands require irrigation and are irrigated.

1535 The explanation of this want of production in the soil must be sought in the habitual dryness of the climate, and the absence of fogs or clouds to modify the high mean temperature which prevails for most of the year, and evaporates moisture with great intensity. Something is doubtless, in special instances, particularly in the sandy delta, due to the porosity of the soil and the absence, within a reasonable distance, of a retentive sub-soil. The main difficulty, however, is the want of rain.

The only statistics of rainfall bearing on the subject, which we have at command, are those taken at the

1536 stations of the Southern and Central Pacific Railroads, which are as follows:

Towns.	Rainfall in Inches.					
	1871–2	1872–3	1873–4	1874–5	1875–6	1876–7
Sumner (Bakersfield),					5.00	2.85
Delano,					3.91	4.15
Tulare,					6.02	3.65
Borden,					4.79	1.85
Merced,	9.50	11.00		10.40	12.68	3.20
Modesto,	12.80	7.65	11.50	8.00	13.39	4 25
Stockton,	20.60	11.40	15.25	11.23	18.84	7.22
Sacramento,	25.50	13.41	23.77	17.75	25.52	9.18
1537 Marysville,	21.50	13.03	26.87	13 84	17.36	12.16
Chico,	31 00	15.09	25 30	18.96	24.70	16.52

Sumner, Delano and Tulare may be regarded as within the district we are now considering.

A comparison of these results indicates, with some qualification that the rainfall increases as we go north.

The crops in 1875–6 were very good, even in the San Joaquin Valley. In the next year, 1876–7, with a reduced rainfall, there was a failure of crops in the San Joaquin Valley, and a partial failure in the Sacramento Valley.

1538 We may therefore conclude with certainty that the rainfall at Bakersfield in 1875–6, which was a season of good rainfall—rather better than the average—was insufficient for the production of an agricultural crop, even in a soil retentive of moisture, and still less in a sandy soil, as is the greater part of the land on the island.

The want of rain is the explanation of the fact that these lands, which have been open for settlement for many years, and which for three or four years have been accessible by rail, remain unsettled and uncultivated, except in places where irrigation is or can be 1539 provided.

We may add that no part of this land can be called timber land. There is generally a fringe of cottonwood and willow along the water courses, but, with these exceptions, there is no growth of trees.

Neither is it believed that the lands are mineral lands.

Under this statement of facts and circumstances we feel able to say, without any misgiving, that, in our opinion, the lands in question are desert lands, as desert lands are defined in the Act of March 3, 1877;

1540 that is that they cannot produce an agricultural crop without irrigation.

Very respectfully, your obedient servants,

B. S. ALEXANDER,
GEORGE DAVIDSON,
G. H. MENDELL,

Mr. McALLISTER—What do you mean by Kern Island? I don't understand precisely what is meant by Kern Island.

A—We received that information as we received a great deal of that, as you will see by the first paragraph. We were asked by Haggin & Carr to obtain
1541 statistics.

Q—I ask you simply what is Kern Island?

A—I understand it to lie southwest of Kern River, and to embrace the land between the New Fork; I think you call it New Kern River.

Q—New River?

A—And the Old South Fork. That was my understanding at the time.

Mr. McALLISTER—Q—You have spoken in your report here as to the land lying upon water courses receiving either by overflow or seepage a certain quantity
1542 of water from these water courses. What, in your judgment, would be the effect of withdrawing that water from those lands which lie along the water courses?

A—They would become arid. These examinations and measurements of water which I have spoken of on Buena Vista slough were made with the assistance of Mr. McCray and two other men.

Mr. GARBER. Q—Do I understand you to say, Mr. Davidson—I am afraid I have misunderstood you—to say that you did not know of your own knowledge that the statements in this report are correct?

1543 A—For instance, we made a statement in there, as I have heard you read it, that hundreds of houses had been deserted. Such things as that, of course, and that there are 27 canals, were upon information.

Mr. McALLISTER—We object to the parties putting the paper in and then attempting to show that it is hearsay.

Mr. GARBER—He answered on re-examination contrary to what I thought he answered me, else I should never have offered this paper. He states that he does not know that it is correct. If that be correct I ask to withdraw the paper.

1544 Mr. McAllister—We object to the paper being withdrawn.

Mr. Garber—As it now appears by the the statement of the witness that he does not know of his own knowledge that these facts are correct, I now ask leave to withdraw this paper and not to offer it in evidence.

Mr. McAllister—We objected to the paper when it was offered. It was ruled in against our objection. We made no objection to the contents of that paper on the ground that it is a hearsay. We think the paper should stand in the case.

1545 Mr. Garber—I offer to withdraw the paper.

Mr. McAllister—We object to it.

The Court—I think a party has a right to withdraw any testimony he may have put in. In considering over the matter when the paper was offered I am inclined to think that the Court erred in admitting that in testimony as a part of the cross-examination. I could not see that it was contradictory of or would explain anything that he gave in his direct examination. I am satisfied that it should be stricken from the testimony. At least the Court will not consider it in considering the issues in this case.

1546 Mr. McAllister—There is a great part of that, your Honor, which is derived from personal observation, and I do not acquiesce in the proposition that when a man calls a witness upon the stand, and don't like his testimony, that he can then turn around and say, I don't like his testimony, and will withdraw it. I don't understand that to be the rule. If a party puts a witness on the stand, and he testifies, his testimony may be very disastrous. If he can withdraw all the disastrous testimony and leave in simply that testimony which suits him, he obtains a very great advantage.

1547 Mr. Garber—I understood this witness to say that he knew that to be correct, In that view I offered it. Finding that it is not so, I ask to withdraw it; if they want it in, it is another thing.

Mr. McAllister—Only certain parts of that testimony are hearsay, the balance is from his own observation. So far as it is hearsay, if they seek to have it stricken out, they can have it done.

Mr. Garber—I ask leave to withdraw the report, to have it stricken out. If they insist that it shall stay n, I want a ruling.

The Court—Let it remain as it stands.

1548 Mr. GARBER—I except to the order refusing me leave to withdraw it.

Mr. MCALLISTER—A large part of that report is from your personal knowledge?

A—Yes, sir.

Mr. GARBER—What part of it?

A—It would be very difficult at this time to pick out every item.

Q—I must ask you to do it. What part is from your personal knowledge and what part is hearsay?

A—I could not go through that now and pick out every item that was personal.

1549 Q—We can't have it stand in that indefinite way.

A—In the first place I have never seen the original since it was signed by us three.

Q—I will ask you, if you please, to tell me what parts of that are from your personal knowledge, and what hearsay?

A—It would be almost impossible at this date to pick out every item of personal knowledge and every item of knowledge that we gathered from others.

Q—I should think you could tell.

A—I cannot. I could not tell what townships we went through. We were driven through sometimes by
1550 Mr. Carr, and sometimes by others, and they told us we were going through certain townships and sections. We had a map.

Q—Will you please tell me what portions of that report, after reading it now, you can pronounce positively that you know to be true from your own personal knowledge, and not from hearsay.

A—I cannot. There is some of it that I can.

Q—Please tell me.

A—That the whole of this land is arid land.

Q—Please read it over, and give me all.

1551 A—I could not at this date.

Q—I only wish you to tell me what you can remember, whatever there is in there that you can state now is of your own personal knowledge.

A—I might omit a great deal that I saw and got of my own knowledge, and state that I got it from some of the others.

Q—Understand; I only wish you to tell me now everything there is in that report which you do know of your own personal knowledge?

A—That is a hard question to answer. I doubt whether anybody can go through that and answer such a question as that.

1552 Q—I don't ask you to tell me what portion was from hearsay, but what portion was from personal knowledge; you state that certain portions you now know were from personal knowledge. I wish you to tell me what they are?

A—There may be a great deal that I would not remember now, that I did know at that time.

Q—Read it over again, and tell me what portion of it you now know was from your own personal knowledge.

A—I know that the "Kern River emerges from—

Mr. McAllister. (Interrupting.) Read it, I have no objection to that.

1553 [The witness continues to read as follows]:

"A short distance above the town of Bakersfield from the foot-hills, and enters upon a sandy plain, which may properly be called its delta."

Q—That you know to be a fact?

A—Yes, sir.

Q—From your own knowledge?

A—Yes, sir. [Reads:] "While in the foot-hills, the river runs in a single and unchanging channel at the head of its delta; where it is no longer held on either side by unyielding banks, it separates into several channels or sloughs."

1554 We had pointed out to us one or two of the old sloughs as being part of the old channels, and we saw a part I think, of what is now called the old slough.

Mr. McAllister—Old River?

A—Old River. When we got further down, we didn't drive enough over the delta to say that we had seen every one of those minute channels or minor channels, although we passed over several of them, and I have seen some similar indications in my recent visit. [Reads]: "This plain or delta is low and sandy." I know that of my

1555 own knowledge, that the district known as Kern Island embraces the whole of those townships. I only know by reference to the U. S. Survey maps. [Reads]: "The remaining townships which we visited, as well as parts of those last mentioned, are not intersected by sloughs. They are higher, and cannot be regarded as delta lands. This description naturally divides these lands into a classification of two heads, viz: delta and uplands. A further analysis might result in other classification relating to the character and elements of the soil, the presence or absence of alkali, the existence or absence of a clay layer within a few feet of the

1556 surface, all of which are important in their way. But for the purpose of the present investigation, it is not deemed necessary to personal inquiry further in this direction."

Q—Is that a fact, within your own knowledge?

A—Yes, sir. The purpose which we had in view was to come to a conclusion. Is there any necessity of reading that?

Q—Only where it states facts.

A—This is an actual fact; but I don't see that it has anything to do with it. [Reads]: "The purpose which we had in view was to come to a conclusion in our own
1557 minds whether these lands are desert lands in the sense in which the qualifying word is used in the 2d section of the Act of Congress providing for the sale of desert lands in certain States and Territories, approved March 3d, 1877, which says, "that all land, exclusive of timber lands and mineral lands which will not without irrigation produce some agricultural crop, shall be deemed desert lands within the meaning of this Act." "The undersigned, while acting as Commissioners of Irrigation under the Act of Congress, approved March 3, 1873, visited this region in the month of May, 1873.
1558 We passed from Tipton to Bakersfield, a distance of about 50 miles by stage, and passing to the south of Bakersfield, we viewed Kern Lake, and extended our examination to San Emidio Cañon."

Q—That is a fact?

A—Yes, sir. ~~[Reads.]~~ I am reading these facts.

Mr. McAllister. All that you read now are facts?

A—Yes, sir. [Reads] Between Tipton and Bakersfield we passed no houses, except the stage stations, three or four in number, nor were there any evidences of cultivation within the radius of our vision throughout this journey, from Tipton to San Emidio, except in a limited
1559 district in the vicinity of Bakersfield, where irrigation was practiced. The country was covered with a scanty crop of wild grass suitable for pasturage. In order to illustrate our opinion at this time, we think it proper to make quotations from our report of the San Joaquin, Tulare and Sacramento valleys, published in House of Representatives Executive document 290, LXIII Congress, 1st session."

Mr. McAllister. That was the 43d Congress and first session?

A—It is so mentioned here.

Q—That is the fact?

1560 A—Yes, sir.

Mr. GARBER. Which of those statements in those quotations from the report do you know to be true of your own knowledge?

A—Those that I have been reading.

Q—A quotation from the report to Congress?

A—Now you are going back to 1873. We traveled in that examination 3200 miles.

Q—Please read on and state as you come to it, whether you know it to be a fact of your own knowledge?

The WITNESS continues reading as follows: "When
1561 comparing the relative rainfall of the northern part of the great valley with the southwestern extremity thereof in the vicinity of Kern Lake, we said that this latter section is the driest in the whole valley."

That we say of our own knowledge. The next paragraph I omit, because we never measured the rain.

Mr. MCALLISTER—You can state that that paragraph was from hearsay.

A—The paragraph was this: "And probably only half the rain falls there that falls about the vicinity of Bakersfield."

Q—That is hearsay?

1562 A—That is a probability. Then there are one or two questions about the rainfall; one or two paragraphs about the rainfall at Modesto and the rainfall at Visalia, which we obtained from information.

Q—That is all hearsay?

A—Yes, sir.

[Reads]: "The rainfall of the years 1868–'69, 1869–'70, and 1870'–'71, was marked as not only below the average over the whole extent of the country, but throughout the southern section, south of Monterey and in the southern part of the great valley the rainfall
1563 was so limited that neither grain or grass grew." All that sentence, that part of the sentence, "and in the southern part of the great valley the rainfall was so limited that neither grain nor grass grew," we only knew from hearsay. The other part was from my own personal knowledge, for I was down in the southern country. [Reads]: "From Tulare Lake to San Diego the country was nearly desolate, and in March, 1871, the usual season when the crops should be luxuriant, not a blade of grass was to be seen over the great plains, and through the valleys which are richly covered after favorable rains, hundreds of thousands of sheep, horses and cattle were lost by starvation."

1564 That is principally referring to the country south of this region which I had traveled through. [Continues reading as follows]: "The practical deduction of the farmers in the southern part of the great valley is that they can secure about two crops in five seasons."

That I should take out; I can't say whether they can secure two or one.

Q—That you take out as hearsay?

A—Yes, sir. About the drouth of 1862'-63 and '64, I know nothing; I was not then in San Francisco. In 1850, I will omit that as—

Q—State it so that the Reporter can get it.

1565 A—Well, I omit this: "In 1850, only 7 inches of rain fell at San Francisco." Such a season now, without irrigation, would produce a famine.

Q—That you know nothing about?

A—I know, personally, it was a very dry season; but I do not know the number of inches.

[Continues reading, as follows]: "We called attention to the very large area to be irrigated from the Kern River and the smaller streams, and gave the warning that the water must be economically distributed."

Q—That you know is a fact?

1566 A—Yes, sir. We have also stated that even the scant rainfall of this section did not do its full duty for the crops. I have no information of that section.

Q—That is expressed at random?

A—Yes, sir. [Reads as follows:] "During May, 1873, we experienced a temperature of 130 deg. in the sun, between Bakersfield and San Emidio Cañon, and for months the temperature in the sun ranged over 100 deg."

I withdraw "and for months the temperature in the sun ranged over 100 deg;"

Q—That is out?

1567 A—I withdraw that part, the 130 degrees I know.

[Reads]. "This great heat, accompanied by excessive dryness of the atmosphere, and months of cloudless sky, evaporates every particle of moisture from the ground, and produces conditions which the farmers of the Atlantic States can hardly comprehend. It also demands a larger supply of water for maturing a crop, than would be the case if the ground was moist when the proper season of plowing and sowing arrived."

Q—Do you stand by that?

A—Yes; I stand by it.

Mr. Garber—You know that as a fact, yourself?

1568 A—Yes, sir. [Reads]. "Throughout the valley at midday, in the middle of summer, the temperature very closely approximates 100 degrees in the shade, and is frequently above that." I withdraw that actual knowledge of this statement. I hardly need withdraw that, because we were in the valley in May and June and a part, I think, of July and August and a part of September. That is, in the great valley of California. We are referring to that valley, and that was about the condition, because we did even further north find it 116° in the shade, therefore the statement may stand as our own personal knowledge; and among the
1569 conclusions which we reached will be found the following:

It is a very difficult thing to say, referring to these conclusions of 1873, whether we based our opinions upon what we actually saw ourselves, or somewhat on the statistics which we gathered.

Mr. McAllister—Those conclusions are the findings of the Court?

Mr. Garber—I suppose those conclusions were particularly based upon your own observations, and partially upon what was hearsay?

A—Yes, sir.

1570 Mr. Garber—That is sufficient for those conclusions. You state that they were partially based upon facts within your own knowledge, and partially from hearsay?

A—Mostly from our own personal examination, and partly from statistics that we gathered.

Mr. Garber—Pass over them.

Mr. McAllister—You had better read them and see whether you agree with them now. You might strike a conclusion that was a good one.

A—They might be modified to-day; we might modify
1571 some of the details of our conclusions, because we have had much more experience, but the general conclusions, I think, are sound.

Mr. McAllister—Suppose you read them as you go along.

A—[Reads]. "4th: That irrigation is much needed, particularly in the San Joaquin and Tulare Valleys. The production of these valleys would be increased many fold by a comprehensive system of irrigation, the value of irrigable land and of the revenue derived from it, both by State and by the people, will be increased many fold in the same ratio."

1572 "21st. That the relation of the United States to the irrigation of California is for the most part indirect, but that in the southern end of the valley between Visalia and Bakersfield and south of this town, it is believed that the United States own many thousand acres of land which are capable of irrigation. That most of this land cannot be cultivated under existing circumstances."

When we examined the valley for Mr. Haggin, we found that to be so. [Reads]: "That it has no value except for pasturage during part of the year; that if irrigated its value would be increased many fold; that
1573 under these circumstances it may be a question whether the United States ought not in some way to encourage the irrigation of these lands."

These extracts from our report clearly indicate the opinion which we held at that time. A second visit to this locality made us familiar with the changes that had taken place in a little more than four years. In relation to this question of the number of canals, we obtained that from the authorities here. I do not know whether there were 27 or 37. I do not know that as a fact. [Reads]: "These lands are nearly all within the district of the delta or island before described.
1574 Several canals are, however, under construction, for the purpose of irrigating the upland."

That referred to the one which I believe you call the Calloway.

[Witness continues to read as follows]:

"Under such canals as were completed we saw fine farms under cultivation and producing large crops of grain and alfalfa, but we have seen no place where a crop is raised without the aid of water transported to the ground by natural or artificial channels, and distributed either by the usual process of irrigation,
1575 seepage, or occasionally by natural overflow."

Mr. McAllister. Q—That was a fact within your observation, wasn't it?

A--Yes, sir.

[Reads]: "Above the canals, and within the radius of our examination, we have failed to see a sign of successful cultivation, or indeed of an attempt at cultivation. The only occupants of the land are the nomadic sheepherders, who manage to secure a sustenance for their flocks during a part of the year."

Mr. McAllister. Did you see any of those nomads?

A—I saw some of those fellows on my section; that is, I saw the remains of their ranch on my section.

1576 Q--Are you nearly through?

A—Just wait. [Reads]:

"At present this district above the canals, when not covered with sagebrush, is perfectly bare of vegetation, and it is hardly possible to find a drier landscape than this desolate country presents. We are therefore confirmed in the views which were expressed in our irrigation report, and we feel sure that there is no chance of error in stating that all the land under consideration outside of Kern Island, is perfectly worthless for the purposes of cultivation without the aid of irrigation."

Q—Is that a fact that you know?

1577 A—Yes, sir.

[Reads]: "The same statement may be made with reference to the land embraced within the limits of Kern Island, with the qualification that there are exceptional strips of small area which lie upon the watercourses, and receive from them by seepage or overflow a certain quantity of water. Even the lands classed as overflowed lands require irrigation and are irrigated. The explanation of this want of production in the soil must be sought in the habitual dryness of the climate and the absence of fog or clouds to modify the high mean temperature which prevails for most of the year,
1578 and evaporates moisture with great intensity. Something is doubtless in special instances, particularly in the sandy delta, due to the porosity of the soil, and the absence within reasonable distance of a retentive subsoil. The main difficulty, however, is the want of rain." The statistics which follow were obtained, I think, from the railroad authorities and others. I know nothing about that myself. [Reads]: "Sumner, Delano and Tulare may be regarded as within the district we are now considering A comparison of these results indicates with some qualification that the rainfall
1579 increases as we go north." I know of my own knowledge that the rainfall does increase as we go north in that great valley. As to whether the crops were good in 1875–6, or what they were in 1876, I know nothing of my own knowledge. Here is a conclusion which depends upon the statistics of the rainfall at Bakersfield. The conclusion I have no doubt about at all. The question of the amount of rainfall I know nothing about of my own knowledge.

Q—Just read the conclusion.

[Reads:] "We may, therefore, conclude with certainty that the rainfall at Bakersfield in 1875–6, which

1580 was a season of good rainfall (that I don't know of my own knowledge), rather better than the average, was insufficient for the production of an agricultural crop even in a soil retentive of moisture, and still less in a sandy soil, as is the greater part of the land in the Island.

"The want of rain is the explanation of the fact that these lands, which have been open for settlement for many years, and which for three or four years have been accessible by rail, remain unsettled and uncultivated, except in places where irrigation is or can be provided." I may state that from our examination of
1581 the country that it was a want of rain that failed to produce crops when we examined the country in 1873 and '77.

[Reads:] "We may add, that no part of this land can be called timber land." That I know of my own knowledge.

"There is generally a fringe of cottonwood or willow along the water courses, but with these exceptions there is no growth of trees." On passing over the country along in December, 1880, I noticed that there is a strip of willow growing where there is no water; so that would be an exception to that general remark.

1582 "Neither is it believed that the lands are mineral lands." I didn't know anything about that; that is hearsay.

"Under these statements of facts and circumstances we feel able to say, without any misgiving, that in our opinion the lands in question are desert lands, as desert lands are defined in the Act of March 3d, 1877; that is, that they cannot produce an agricultural crop without irrigation."

Mr. McAllister. Q—That is a fact, isn't it?

A—Yes, sir; signed "B. S. Alexander, George Davidson, G. H. Mendell." I know the signatures
1583 were on the original of which this purports to be a copy.

Monday, April 25, 1881.

F. P. McCray

Recalled for further cross-examination.

Mr. Flournoy. Q—Will you look at that map, Mr. McCray? (Showing map.)

Mr. McAllister—What map?

1584 Mr. Houghton—It is a map produced by the plaintiff at the request of defendant.

Mr. Flournoy. Q—Did you make that map? (Exhibiting map to witness.)

A—I have no reason to belive that I did not. I presume I did.

(The map last shown to witness is marked by the reporter Map D.)

Mr. Flournoy—We offer that map in evidence.

(Here insert Map D.)

Q—What time was this map made?

A—It was made about the 1st of March, 1878.

1585 Q—From your original field notes?

A—Partially so, sir.

Q—It is the map you referred to several days ago when you where on the stand?

The one that you made from those notes?

Mr. McAllister—He mentioned that he made an outline map.

Mr. Flournoy. Q—Is that the map that you referred to as delivered to Mr. Souther?

A—I didn't say I delivered any map to Mr. Souther. After I referred to another map I made the statement 1586 that when I finished a certain portion of the work, and returned to complete the subdivisions of the swamp, Mr. Wible had me make an outline of certain sections, and I gave it to Mr. Wible.

Mr. Flournoy. Q—This is the map?

A—I have no reason to believe that it is not?

Mr. Garber—He gave that map to Mr. Wible.

Mr. McAllister—Yes, he thinks so.

Mr. Flournoy—I understand that is the map you referred to as having been made for Mr. Wible; that is your recollection?

A—I don't remember just what the questions were in 1587 relation to that, but I state here that it was a map I made after finishing the work that I had been sent for and returned to complete a subdivision of the swamp. Mr. Wible stopped me, and had me make an outline map of a portion of the country.

Re-direct examination of

F. P. McCray.

By Mr. Houghton. Q—Do you know for what purpose this Map D was made?

1588 A—I cannot tell you that I know altogether for what purpose it was made.

Q—You say that in part this was made from your field notes?

A—In part, sir.

Q—I ask you how far the slough that is delineated on this map was made from your field notes? How far down?

A—The slough that is continuous there was made from my notes, from the meanderings down into Section 24, or down to the Bonestell place. The balance was made by sketching in from my knowledge of the country;
1589 my remembrance of it and not from any actual survey, as I had not finished the entire Township when called away from it. It is a finished map so far as showing the condition of things at that time is concerned.

Mr. HOUGHTON—I understand you have introduced this map in evidence.

Mr. FLOURNOY—Yes, sir; and it is marked Exhibit D.

Mr. HAGGIN—There is a difference between those maps marked and those actually introduced as exhibits. I want it understood that this map is in evidence.

Mr. GARBER—I suppose what he means is, he don't
1590 understand the other maps to be in evidence.

Mr. MCALLISTER—I suppose they are all in.

Mr. FLOURNOY—One was offered as a diagram and the others as maps.

Mr. HOUGHTON—If there is any question about that I now offer in evidence all our exhibits from one to nineteen inclusive. I understood they went in at the time, all of them.

Mr. HAGGIN—I didn't understand that they went in at the time. They were simply marked for reference.

Mr. GARBER—There is a great deal in these maps you would not pretend would be evidence. I do not under-
1591 stand they are in evidence any more than so far as they have been proved.

Mr. MCALLISTER—Yes, so far as they have been proved as correct. We put them in as a map generally goes in, so far as the testimony relates to them.

Mr. GARBER—For the purpose of explanation and reference?

Mr. MCALLISTER—Yes, sir. Of course it don't follow that everything in the map is true unless you prove it.

Mr. GARBER—We had better understand that.

Mr. MCALLISTER—We want to offer all the papers,

1592 from one to nineteen, both inclusive in evidence, stating, so far as the maps are concerned, that they are only in evidence so far as they are proven, and for the purpose of illustration.

Mr. GARBER—Don't let us mix up papers with maps.

Mr. HOUGHTON—He says so far as the maps are concerned.

Mr. GARBER—So far as the maps are concerned they are offered in evidence?

Mr. MCALLISTER—Yes, sir.

Mr. GARBER—We object to the maps going in evidence as evidence of anything contained upon or shown by the
1593 maps. There is no objection to their being marked as diagrams for the purpose of explanation to be used as maps, but not as proof of any fact which is not proved by other testimony.

Mr. MCALLISTER—Maps one to six, both inclusive, we offer in evidence, your Honor. We are simply seeking to use them as illustrations so far as they have been proved by witnesses, to the extent that the testimony applies. I supposed that they were all in before.

Mr. GARBER—I have no objection to them as diagrams. My objection goes to their being received as evidence of
1594 any fact themselves, except as proved by testimony.

Mr. MCALLISTER—They don't prove anything, except so far as established by witnesses, but they become necessary to explain the testimony of witnesses and to illustrate the case.

Mr. GARBER—To that extent there is no objection.

The Court—They will be considered in evidence.

Mr. GARBER—Subject to that exception.

[Here insert maps 1, 2, 3, 4, 5 and 6.]

Mr. HOUGHTON. Q—State how you established the initial point in 1877, in connection with the survey of
1595 the lands delineated upon Map No. 2.

A—I was first shown the corners of Sections 13, 18, 19 and 24, standing at the head of the levee constructed by the Kern Valley Water Company, which is upon the range line between Range 24 and 25 East, Township 30 South. From that point I ran north on the range line for three miles, coming to the corner of Township 29 and 30 South, Range 24 and 25 East. (Witness gives the point on Map 2.) At that point I found the mound and post standing in it. By its side I also found an old stake; from there I ran west on the Township line between

1496 Townships 29 and 30 South. At one mile I found an old post, as well as I remember, lying in the water channel in alkali ground. At a mile and a half I found a quarter section corner, and original quarter section corner, by which I mean I found a mound with coal in it and a trench around it. I then returned to the beginning, and run south for three miles; that is the corners of Townships 30 and 31 South, and 24 and 25 East; and at a point in the canal I found a mound there, and the corner post standing in it, and in the mound was coal. That point and the one that I began at, and the Northeast corner of Township 30 South, Range 24 East agree, and
1497 after doing that I ran the range lines between Ranges 24 and 25 East, and Townships 30 and 29 South, and corner of Townships 29 and 30 South, Range 24 and 25 East, and ran that range line to the seventh standard south, and then I ran westward or west along that line. The line that I referred to as the seventh standard south, is between Townships 28 and 29 South, that is the seventh standard. When I arrived at the seventh standard south, I ran west along that line. Almost at every point running along the swamp land I found the original corner and mound and coal, and in some instances I also found
1498 a stake. And after coming to the swamp my duty was to establish the northeasterly boundary of the swamp, the segregation line between swamp and overflowed land. I did this by running out all the sections and exterior lines that border upon the swamp and overflowed land, finding the original corners that were established by the former surveys at the time the Government land was subdivided. The same was also done on the west or southwesterly side from one extreme to the other.

Q—Was the object, in running out all these section lines which you have spoken of, on the east and on the west, a check or to show the correctness of the initial
1499 point?

A—They were as a check, to show the correctness, and also to establish the boundaries of the swamp.

Q—After having established those section lines that you speak of, on the east and west, what did you then do?

A—After having established them I proceeded to the subdivision of the swamp. In 1877 I had sectionized that portion of the swamp and overflowed land lying in Township 30 South, Range 24 East, and in Township 29 South, Range 24 East, and in the southerly portion of

1600 29 South, Range 23 East. When I left off surveying, in 1877, my northerly line was the north line of Sections 24, 23, and 21 and 20, in Township 29 South, 23 East. The balance of the land delineated upon map 2 I surveyed about the 1st of March, 1878. Map B embraces all the surveys made by me in 1877 and 1878. In 1878 I surveyed my north line. The north line of my survey was the northern limits of the swamp land district 121. The northern limit—that is the northern limit of Sections 29, 28 and 27, and Section 35, in Township 27 South, Range 22 East. I made the survey of the balance of the land, that is delineated upon map 3, about
1601 the 1st of April of this year.

Q—How did you establish the initial points in connection with that survey made in 1881 of the land designated on Map No. 3?

A—When I began the survey I proceeded to the point that I had previously established as the northern limit of this district 121—the point I had established in 1878, in connection with the surveys I have already referred to—that would be on the northern boundary of Section 29 in Township 27, Range 22 East. I then ran to the margin of the slough and along the slough, to the township line
1602 between Townships 26 and 27 South, Range 22 East. I got there in the evening. I was not satisfied with the way it was, and rather to satisfy myself fully, or return to the corner of Sections 19, 24, 25 and 30, on the corner between the Ranges 23 and 22 East, Township 27 South, I then ran that line north 4 miles to the corner of 26 and 27 South, Range 21 and 22 East. I found that it agreed with the surveys made the day previously. Then from there I ran to the slough.

Q—And from that you made the balance of the surveys?

A—From that I made the balance of the surveys.

1603

Cross-examination of

F. P. McCray.

Mr. Flournoy. Q—You say that you have the original sketches; you had them at the time that map was made?

A—I say that at the time I made that map I had sketches that I made on the field during the survey; also went upon the ground when that was made.

Q—Did you take any notes when you went upon the ground?

1604 A—No more than what was placed upon the map. I had a map in my hand when I was upon the ground.

Q—After you had made the map?

A—After I had outlined the map.

Q—Before you had outlined it? How did you outline it?

A—I made it; I say that I had sketches, that I finished in part; that I had made from the original surveys. I have these sketches in my possession now. I also had other maps. I had this map here which is marked "B."

Q—You have the field notes of map No. 3, haven't you?

1605 A—I have them that I made of the survey, and will produce them.

Q—And also the sketches and every thing that you have; all the data which you have from which these two maps were made. If you will be kind enough to produce them, I will be obliged. You said, I believe, that map No. 2, or, rather, that map that I exhibited to you this morning, map "D," was a correct map as far as to section 24, and that the balance of it was made up not with accurate observations?

A—Yes, sir.

1606 Q—That is the case?

A—That was sketched in. That map was made embracing that country which embraces the slough up to section 24. It shows more than that. I had surveyed up that far. I had actually meandered to that point, and I made outline maps of it.

Q—This map is correct up to that point, and beyond that you don't know of its correctness. Is that the case?

A—The map was made to show the country. It was an outline map.

Q—I ask you if it is correct, this map, up to that point, Section 24?

1607 A—Of what it shows; yes, sir.

Q—It was intended to show the slough, as you meandered it, up to Section 24?

A—Intended to show the slough as I meandered. I made the meandering of that slough, and platted it down, and traced it on the map.

Q—It is correct that far?

A—Yes, sir. I platted it down and made surveys.

Mr. McAllister—I want to fix this Section 24. In what township and range?

A—That is in Township 29 South, Range 23 East.

1608 Mr. GARBER—When did you make that map No. 2?

A—About the 1st of this month.

Mr. HOUGHTON—I understand you to say, in answer to a question by Colonel Flournoy, that you had field notes of the surveys in connection with the land delineated all platted on map No. 3. Is that true as to all the land platted upon that map?

A—Not to all of it. I say I had field notes of the survey I made of the slough.

Mr. FLOURNOY—Did you have copies of your original field notes when you made map No. 2?

A—No, sir. I had sketches; nothing but sketches.

1609 Mr. HOUGHTON—Then I understand you to say that portion of the map No. 3, that is, the two sections which you surveyed in 1878, is what you have not field notes of?

A—Yes, sir.

Q—You have of the others? In other words, the two miles going north, represented in map No. 3, is included in the survey of 1878?

A—Yes, sir.

Mr. MCALLISTER—So that map No. 2 and a part of map No. 3 expresses the survey of 1877 and '78?

1610 A—Yes, sir.

Mr. FLOURNOY—I wish to see every paper—every memorandum or data upon which you made either of these maps, or both of them.

A—I can show you the sketches that I took in the field at the time. Made them as I went along. I have the sketches with me.

Q—And your field notes on map No. 3?

A—I have the book with me now. I have them with me in the Court room. (Two papers handed to counsel by the witness.)

Q—These were the sketches made by you at the time
1611 of the original survey?

A—Yes, sir.

Q—These are the sole data upon which you made the map No. 2, except your observations in the field at the time, of which you have no memoranda?

A—I had this, and I went upon the field. These were made upon the field, as I have stated to you, in 1877 and '78. Then I took the map and went upon the field; took map "B" and map No. 2. I told you I took it from this map "B" also.

Mr. FLOURNOY—I will have these marked.

1612 The WITNESS—They are private property, and I don't wish to part with them.

[The papers are marked by the Reporter "E" and "F," for identification.]

Q—Are these correct?

A—They were made upon the field.

Q—You have no objection to leaving them here for the purposes of this case, have you?

A—They are private property, and I don't want to lose them.

Q—I understand, then, that these two exhibits, "E" and 'F," are the only original data that you had at the
1613 time that this map No. 2 was made?

A—I had map "B" also.

Q—That is not original. These are the only original data or field work you had at the time?

A—I stated that I made them upon the field; made these sketches as I went along over the field.

Q—This is the only evidence of work in the field that you had at the time that Map No. 2 was made?

A—Then I had that map, I outlined that map when in the field, I went over the field. When I wanted to get any point I got it from the corners I established
1614 there, and established definitely upon the map; I made no notes.

Q—What I meant was this: these are the only original data or field works you have as to Map No. 2?

A—I said that I made this upon the field.

Q—Was this the only original data of field work that you made in the field?

A—I had other maps; I had that Map "D."

Q—That is not field work?

A—A portion of it came from that map.

Q—I understand, I say, that Exhibits "E" and "F" are the only original data of field work, work made in the field
1615 upon which this is based?

A—I said that they were made in the field.

Q—And that is all that you have in the way of memoranda?

A—Well I made surveys when on the ground.

Q—Then you have no other memoranda?

A—I could not state it further than that?

Q—These are the sole memoranda?

A—These are what I had when I went there.

Q—Was there anything else.

A—No, sir; nothing of any consequence.

1616 Q—Was there anything that was not of any consequence?

A—No, sir; there was nothing else?

Q—I have not seen those field notes of Map No. 3 yet; where are the field notes of No. 3?

A—I have them in my pocket. They are in this book. This is my own private field book. It embraces my survey. In this book are other things that are private and belonging to other persons.

Q—Well, if you will make copies of them they will be more useful to us, and we won't handle your book at all?

A—I can show it to you for your satisfaction.

1617 Q—We would have to use the book. I would prefer you just to make a copy?

Mr. McAllister—Can't you read the field notes off to the reporter?

A—I presume so. It covers several pages; quite a number of them.

Q—Are there sketches in them, or simply writing?

A—Simply writing, no sketches.

Mr. Flournoy—If you will let us have that we can have it copied or you can copy it for us.

A—I can copy that for you.

1618 Mr. McAllister—I think he had better keep that on the stand. We want an opportunity to cross-examine. Read to the Reporter and let him take them down. Read only your field notes to the Reporter and let him take them down of this map No. 3.

The Witness—I would like to state before reading that that the notes—— Well, this is a survey on Buena Vista Slough.

Mr. McAllister—You are to read precisely what is there. We want you to give it exactly as it is there on the field notes without comment.

The Witness—You will agree to understand it?

1619 Mr. McAllister—Well, you read what is there.

A—Beginning at a point 20 chains east of the corner of Sections 19, 20, 29 and 30, north no degrees $\frac{3}{4}$ west 37 chains, north $69\frac{1}{2}$, east 39 chains. Station on that bank of lake or slough, which is here about 600 feet wide.

Mr. McAllister—Well, now you are not reading it.

A—North 43 degrees, west of northwest bank 6 chains.

Mr. McAllister—You say: "Which is here 600 feet wide." There is nothing there of that kind.

Q—What is that, short-hand?

1620 A—Yes, sir.

Mr. McALLISTER—Oh, it is written in short-hand? That closes me out.

The WITNESS—If you will state to me—— I will read to certain points, if you will tell me when I get to that, I will continue.

Mr. FLOURNOY—Well, read slowly and clearly.

A—South 43 degrees, west—you have that I believe—along left bank at 6 chains south end of trough, 9 chains, station. This is 100 feet wide by 9 feet deep. North $3\frac{1}{4}$, west 14 chains. Station, 100 feet by 7. North 24 degrees, east 6 chains to station. Note—From this sta-
1621 tion high ground of 4 degrees perhaps varies. South 55 degrees, east 18 chains distance, north $12\frac{1}{4}$ degrees, east 10 chains; from this station, the slough turns to the right and runs some 5 chains, and thence to the left at right angles 6 chains, where it forks, one channel running to the right and the other turning to the left. After making fork, each channel is from 25 to 30 feet wide, by 4 feet in depth. North $43\frac{3}{4}$ degrees, west 2 chains, 54 links. At this station slough runs out into wide channel. North $30\frac{1}{2}$, east 14 chains. Station on slough, 30 by 2. North $32\frac{1}{4}$ degrees, west 8 chains. Station. The slough on
1622 this line is well defined; between this station makes an elbow to the right of some 4 chains.

Mr. FLOURNOY—That is a memorandum, then?

A—That is a memorandum of the notes; yes, sir. North $40\frac{3}{4}$ degrees, west 10 chains. Station on right bank of slough or channel, which, between this station, curbs to the right. At this station the channel is better defined, being thus——. I have a little diagram showing 30 by 2 feet north, 73 degrees west, on average, to slough which here varies to the left 20 chains. Here the channel is 60 feet wide and 1 foot of water; would be 2 feet when full. North $26\frac{1}{2}$, west 16 chains, across this
1623 last channel, which comes from the left, 30 chains. Alkali knoll, small channel of water, 2 chains to the left, which now has water in it, 50 chains. Station on bank of slough, which now has water and is at right angles with the course come from by running to the east, 100 feet wide. South 78 degrees, west 8 chains. Station on left bank of water channel, or slough above mentioned. At the middle of this channel, or half way, it runs north, and is 75 feet wide; has water in it. North 24 and $\frac{3}{4}$ degrees, west 25 chains. Station in south side of small lake or slough, which is circular and contains about an

1624 acre. North 89½, west 7 chains and 57 links, on edge of high grounds on left bank of slough. North 23¾ degrees, west, along west edge of swamp and slough, at 58 chains in feet, across to slough to right bank, 3 chains wide, 63 chains in feet; recross above channel, which bears northeast; has no water in it; crossing 128 chains and 71 links to post near house, from which corner of township bears south 69¾ degrees, west 14 chains, distance. Now, this is beginning at this township corner, and the lines that were run up the portion of the range line that was run from the north boundary of swamp land district No. 121, there was no notes of. Simply there was a line there,
1625 simply notes taken and no measure, and from the point that was established. I connected with this last course that is given, 69¾ west and 14 chains, to that township corner, and thence from that corner to this point that is established, with reference to a township corner, and thence along west edge of swamp, which is skirted by a slough. North 60¾, west 16 chains 66 links, stationed by slough upon its left bank. North 19½, west 75 chains 75 links, on right bank of slough; curves to the east, ordinate 400 feet. North 8½, west 18 chains 18 links; station. This course is an average of the slough or channel,
1626 which along here is from 75 to 100 feet wide and is 4 feet deep. North 6¾ degrees, east 27 chains and 27 links. Station on left bank of slough, 50 feet wide. This is at upper end of lagoon. North 22 degrees, west 25 chains and 77 links. West edge of lake curves to the right, ordinate of 300 feet; lake 500 feet wide. North 13 degrees, west 15; station. Edge of lake bears north 71¾ degrees, west 28 chains 79 links.

Mr. HAGGIN—Mr. McCray, did you skip anything there? You said bears something.

A—Well, that stands to the right, that is all.

Mr. FLOURNOY—Read that memorandum in there,
1627 please.

A—Very well. North 21¾ degrees, west 28, 79; then line runs along west side of lagoon, which at this station is ¼ mile wide on the north side, which bears east at this northeast corner, Kerr's, and its northeast corner runs into slough. North 5½ east, leading north into lake crossing and course of slough; again—that belongs on that other line, that portion that I read there; it is so blurred that I——

Mr. FLOURNOY. Q—What is that?

1628 A—I was just reading another portion; I have got on to another line.

Mr. FLOURNOY—Read it as you have it down.

A—North 5½ east, station; 60 by 4; sloping banks; north 9½ west, 13.33; an average of slough 50 to 80 wide, and 3 to 5 feet in depth; north 44½, west 20; 9, station on left bank of slough, 80 by 5; sloping bank; north, 15¾ degrees, west 17 chains and 68 links; this is an average of slough; north 7 degrees, west 13 chains and 94 links; station on east end of hitching-post or rail at Frank Epperly's old camp; north 7 degrees, east 27 chains and 27 links; station on high ground, average
1629 of slough; north 47½, east 14 chains and 47 links; average of slough, or ordinate to left, 400 feet. Note—From this station N. E. of square corral bears south, 78 degrees west, about a quarter of a mile distant; north 37 degrees, east 11 chains, 97 links; ordinate to the right 400 feet. Along here the slough is quite prominent, with deep, sloping banks, 116 feet by 4½; north 56½, west 14 chains; N. 28 degrees, E. 20 chains and 9 links; left bank of slough at 16 chains and 50 links; slough runs to right, making ordinate of 700 feet. At this point the slough runs N. W. leaving the swamp; N. 73 degrees, E. 10 chains and 12 links; sta-
1630 tion on left bank, average; north 23 degrees, ——— chains 58 links; Station on left bank of slough, from where it forks very deep, 100 feet wide; N. 41 degrees, east 17 chains 60 links; which is along the bank 100 wide; water is now 75 feet wide or so; north 46½, west 16 chains 14 links, on the left bank, ordinate to the right, 800 feet; north 2 degrees, west 19 chains 28 links, on west bank; average, 80 by 16; N. 3½, east 27 chains and 37 links; average of slough 100 feet wide; north 29¼, east 20, 58, 100 by 4; north 35 degrees, east 15 chains 15 links; station on that bank at 400 feet; slough, which turns to the right, running 1,000 feet; north 54¾
1631 degrees, west 11 chains and 89 links, on right bank, which is now dry; 30 by 3½; north 54½, west 20 chains and 51 links; station on right bank; ordinate to the left 450 feet; 40 by 3½; north, 45¼ degrees, west 22, 94; on left bank station; 60 by 3; ordinate to the right 300 feet; north 80½, west 19. 94; station on left bank; 70 by 2½; north 1[illegible]¼, west 20, 69; left bank of slough not well defined at this course; Tule House bears N. 77, 35 east; north 66 degrees; east 25 chains, and 97 links, on left bank; Tule House bears 95½ east, and post at the well of Cox & Clarke

1632 south, 56¾ east; north 14½, east 22 chains, left bank; slough not so well defined; no water, which, if running, would be 200 by 3 feet; Tule House, 87—¼ east; north 18 degrees, east 17 chains 21 links; Tule House south 81¼ east; the slough, which runs over plains or runs out from where we stated this morning, enters opposite this place; north 5 degrees, east 15 chains and 80 links; Tule House bears south 75 degrees and 45 minutes east, north 14 degrees, west 34 chains and 64 links, among channels; small lake to the left 400 feet; Tule House south 66½ east, north 2 degrees, W. 31 chains and 73 links, among channels; Tule House
1633 south 58 degrees east, north 4½, west 30 chains, among channels; south 51 degrees and 35 minutes east; Tule House bears north 27¼, east 23 chains and 33 links, among sloughs or channels. Station — channel at this station is 200 feet wide, and when full of water would be 2 feet deep; north 72½, west 29 chains and 24 links, north 28¾ degrees, west 9 chains and 16 links, laguna water 350 to 500 feet; north 7¾ degrees, W. 26 chains and 12 links, running over swamp to mud slough; north 21½, west 31 chains and 73 links; north 31¼ degrees, east 29 chains and 39 links, north 12 degrees 26 chains and 85 links; N. 7¾ degrees, east 25 chains and 60
1634 links, on left bank of dry slough 60 feet, by 4 which comes from the south-east from near the Tule House; north 51½, west 26 chains and 97 links and average of slough; this station is on left bank of slough 80 by 3 feet deep; has 3 feet of water; would hold 7 feet of water; north 67¼ degrees, west 28 chains and 36 links; average and along well-defined slough; north 3¾ degrees, west 24 chains and 24 links on left bank 100 feet wide, and has 3 feet of water with a hole 7 feet in depth; north 41¼, east 22 chains and 58 links; station on left bank of slough, 100 by 7 feet; at this point the slough has the symptom of a lake of about 50 acres,
1635 which is now dry; south—it is not in my notes, but I recollect it was—

Mr. HOUGHTON—Well, don't say anything, just read your notes just as they are.

A—South 62½, west 27 chains and 42 links, and line to the edge of swamp westward; south 45 degrees, west 28 chains and 35 links; station on bank of small dry slough, 40 by 2½; south 43¼, west 26 chains and 82 links south 44 degrees, W. 26 chains and 33 links, S. 41¾ degrees, west 23 chains and 97 links, S. 47¼, west 34 chains and 15 links, south 43¼, west 32 chains and 18

1636 links in high sagebrush; Cox and Clarke's Corral bears south 50 degrees, west about $\frac{3}{4}$ of a mile. Now, then, beginning at Tule House and thence up stream, south 72 degrees, east 19 chains and 32 links; station on right bank of deep slough, which runs by right bank of deep slough which runs by Tule House; here it is 200 feet wide by 5 feet, with sloping banks; at house is 200 feet by 16 feet; opposite this station sloughs come in to this from the west; south 20 degrees, east 22 chains and 21 links; station on right bank, which at this point runs to the right, at right angles to the lands 400 feet, and then turns to the right, runs
1637 straight to the last station; 100 feet wide by five feet in depth; now has water.

Mr. HAGGIN—Mr. McCray, outside of those notes, whereabouts is the Tule House?

Mr. HOUGHTON—Well, let him finish the notes.

Mr. HAGGIN—I want to see, so I can follow generally.

Mr. HOUGHTON—It is on 32.

A—N. $86\frac{3}{4}$ degrees, east 18 chains and 39 links; average of channel, 120 feet wide by $4\frac{1}{2}$ feet; water here ends; south $33\frac{3}{4}$ degrees, east 27 chains; average of channel along this line; so far there is high ground on the east and swamp on the west; south, $43\frac{1}{4}$ degrees,
1638 west 20 chains and 15 links; ordinate to the right of 200 feet; water in holes; 100 feet wide by 6 feet in depth; south $79\frac{1}{2}$, west 19 chains and 24 links; station on left bank on high ground; 120 feet by 4 feet; water in ponds; south $29\frac{1}{2}$, west 18 chains and 15 links; station on left bank; 200 by 4; here an arm bears to the west of some size; south 3 degrees west 32 chains 45 links; station on right bank on high ground. The above mentioned arm connects with this one about midway of this line, forming an island of high ground. South $54\frac{1}{2}$, west 25 chains and 36 links; station on right bank; 75 feet wide by 4 in depth; ordinate to the
1639 right of 650 feet; south 22 degrees, west 30 chains and 36 links; station on right bank; ordinate to the left 580 feet; south $52\frac{1}{4}$, west 38 chains. and 88 links; station on right bank; ordinate to the right 400 feet; the Tule House bears north 15 degrees, and 40 minutes east; square corral bears south $53\frac{3}{4}$ west; south $52\frac{1}{2}$, west 27 chains and 9 links; station on left bank; average of the channel, 200 feet by $4\frac{1}{2}$; south 2 degrees, west 29 chains and 69 links; station on right bank; south $10\frac{1}{4}$ degrees, west 32 chains and 13 links; station on right bank, 200 feet N. W. of Epperly's hog

1640 camp at bed of slough; south 45 degrees, west 29 chains and 42 links, among tules and channels, but well defined; south 55½, east 31 chains and 63 links; south 60¼, east 37 chains and 21 links; station on right bank; channel at this point is 80 by 4 feet. Station No. 2, in survey on west side, bears south 20¾ degrees west; south 59¼, east 33, 94; on left bank; average of channel, which varies in width from 300 to 75 feet; station No. 2; south 39¼ degrees; south 32½, east 25 chains and 32 links; station on left bank; 80 by 3½. Note—This line runs across centre of island on high ground; slough of same size as above runs on east and
1641 west side. South, 43¾ degrees, east 27 chains 23 links; average of slough, which for some distance runs through tule swale, with high ground on both sides; Station No. 2; south 32½, west 75¼, east 20, 39; at mouth of Hog Slough; south 75¼, east 20 chains and 39 links, to the mouth of Salt Slough; station is on high ground between sloughs. Station No. 2 bears south 37 degrees west, south 32 degrees, west 18, 54, running across to left bank of slough, 60 by 3½, and which connected with slough on last course about midway of it; south 1½ degrees, west 25, 06; station on left bank, 50 by 3; ordinate to the left, 500 feet. Note.
1642 This station is on high ground, and there is sagebrush on the west; station 2 south 54 degrees west, south 4½, west 25 chains 99 links; average of slough. Station No. 2 south 66½ west, south 13½, east 23, 78; station on left bank ordinate to the left 300 feet, which is 100 by 3; high ground on the west. Station No. 2, south 68, 10 west, south 12 degrees, W. 33 chains 94 links, left bank; average of slough is 100 by 3½. Station 2 south 78, 20 west, south 19¼, east 27, 69; station on left bank, 100 by 4; ordinate to the left, 400 feet. Note. Opposite this station slough enters from the east, high land on the east, which is the outside slough. Station 2 bears
1643 south 88 degrees west, south 36 degrees, east 32, 69; average; south 14 degrees, west 25, 30; average of slough; south 27½, east 23, 24; south 1 degree, west 18, 94; south 54½, east 27, 49; south 68¾ degrees, east 19, 12, running to left bank of slough, 80 by 5, with water south 9 degrees 25 chains and 52 links; south 30½, east 44, 33; south 24 degrees, 56, 82; this course is on average of channel of different widths of 100 to 40 feet, from 2 to 4 feet; south 61¾ west, south 52½, west 54, 44, running over high ground to each side of largest swamp and main slough which runs to the north; south

1644 16¾ degrees, west 43, 64; average of slough which skirts ground, thus:

[I have a diagram there.]

Re-direct examination of

F. P. McCray.

Mr. Houghton. Q—You say, in making map No. 2, you had and used map B, which is in evidence?

A—Yes, sir.

Q—When did you make that map B.

1645 A—In 1878. That was made from field notes and an actual survey made by me, and that was my report when I handed in the map; the map was made accompanying it; that map was the result of my survey of 1877-78.

(The witness is shown Exhibit D.)

Q—Map "D" does not show a continuous slough in there through those swamp lands. How is that? Will you explain that?

A—At those points where the sloughs are made, they partake somewhat of the nature of the main slough running down by Wible's Camp.

1646 Q—No; but I ask you why the slough stops at Section 24. After that, is there not a continuation of the slough? Why does that appear in that manner on that map?

A—That is as far as I meandered it.

Q—Was that as far as you ran with a view to locating the slough at that time?

A—I made a survey of it.

Q—Did you pretend at that time to locate the slough beyond 24.

A—No, sir.

Q—Section 24, in Township 29 south, range 23 east.

1647 What were the explanations you started to make while you were reading those field notes? You started to make some explanation in connection with those field notes while you were reading them. You were told to stop and go on reading from your field notes. What were those explanations you were going to make when you first commenced to read the field notes? Have you any explanation or addition to make to those field notes?

A—I think what I was going to say was that these notes are simply the general outlines of it; the courses

1648 and distances were taken on the ground, and the notes were taken hurriedly, and surveyors' notes are generally understood only by themselves, and I could not answer for the intelligibility of it; and, in addition to that, I always took sketches along. In going along I made plattings as I went along in order to define the way that the line ran with reference to the sloughs.

Q—Where are those plats?

A—I don't know, sir, where they are. It is impossible for a person to write down just the way it is, and that is the most convenient way. I don't know where those field notes are. I just made sketches along; I
1649 had paper with me at the time of making the survey.

Q—You then, in addition to making these field notes, made an actual plat on the field of the slough?

A—Yes, sir; I platted it as I went along, so as to aid the eye and the memory.

Q—And then afterwards transferred it to this map No. 2?

A—Yes, sir.

Mr. Flournoy—Those orginal notes you haven't got?

A—No, sir.

Q—Now, then, as far as you meandered, say about to Section 24, from the canal there at Wible's camp, or
1650 the dam, in so far as these Exhibits E and F go, they are absolutely correct there, ain't they?

A—I don't know that they show the meanderings of that slough on that portion any more than a general outline. I had run out that slough, and had meandered that slough; I don't know that they show that. They show more particularly a lower portion of the part that I subdivided.

Q—Well, what have you got there?

A—These notes.

Q—These original sketches you made in the field?

A—These are the sketches I made in the field.

1651 Q—And they are the only data of field work that you have upon which that map No. 2 was made?

A—In part—I told you that I had that map "B."

Q—Map B is not field work; I am speaking of field work. These are the only data, as you stated before—these are the only original sketches that you had when you made map No. 2; they cover map No. 2, don't they?

A—I have stated that they cover the major portion of map No. 2; perhaps not the lower portion. I tell you I went upon the ground and made that map; I took my transit.

1652 Q—I ask you if these original sketches show map No. 2 from the dam here up to Sec. 24, from the Wible dam, the dam above Wible's camp, up to Section 24? I mean to where you meandered the slough. Are those sketches of your original work in meandering that slough?

A—These are sketches of my work that I made at that time that I made the subdivisions of the swamp.

Q—Well, didn't you meander the slough at that time?

A—I did meander the slough in 1877.

Q—Did you meander the slough at the time these
1653 sketches were made?

A—No, sir; I don't think I did; I don't know that I did.

Q—Did you make two surveys of this Swamp Land District in 1877?

A—I began the survey in 1877; I carried it on a certain distance and then I discontinued it. Along the latter part of 1877, about the end of it and in March, 1878, I continued again.

Q—Well, don't those sketches you have there embrace the territory as made out by you as field work up to Section 24, to where you say you have meandered
1654 the slough?

A—I don't know; but they do embrace all the work I did; that was the aim.

Q—They do show the slough, don't they?

A—They do not on a portion of it, below what is called the upper township they don't show all the slough; they do show portions of the slough.

Q—Why don't they show it all?

A—I suppose they didn't want it done; didn't have any occasion to have it done.

Q—Weren't you meandering the slough at that time?

1655 A—I was meandering the sloughs at different times, and whenever the section line crosses the slough it was my object to put down, wherever the section lines crossed the slough, the distances as given to me by the chainmen.

Q—You have been testifying to actual meanderings of the slough.

A—Very well; there are the notes.

Q—Do these notes show anything of the slough?

A—They show meanderings of the slough. I meandered that slough.

1656 Q—Do these notes, the sketches, show any meanderings of that slough?

A—Yes, sir.

Mr. McAllister—The field notes of 1877 are not produced.

Mr. Flournoy—These sketches, E and F, there. I understand he has not got the field notes. He says he has not seen them since 1877.

(To the Witness)—These sketches were made on the field at the time of the survey, weren't they? Made at the time you surveyed the slough?

A—How could they be made at that time I meandered
1657 the slough? They don't embrace only a very small portion that that is on. They were not made at the time I meandered the slough; they were made at the time I surveyed—the subdivision of the swamp; at different times.

Q—Then have you any original data at all made by you at the time you meandered the slough?

A—I have not got the original field notes made at that time.

Q—Have you got any original sketches of that?

A—None, only what is shown on map B.

Q—This is not an original sketch. Have you any orig-
1658 inal sketch at all of your meanderings of that slough?

A—Of this portion that I meandered, except the maps.

Q—Nor the field notes?

A—At the time I did the work I made that map B, too.

Q—Then these exhibits—what are these sketches intended to show?

A—They are sketches intended to show the portion that is subdivided there and how it was. Just such as I chose to put down at the time.

Q—Well, there are portions of the slough marked
1659 here, crossing sections for some distance, and portions along the bank. Was there any reason to your mind for making the difference in the outlines of the slough that you recollect of?

A—When I made this, I tell you that I made that—I had the subdivisions of that country. I had them along with me whenever I would run a line north between sections, or through certain townships; whenever the chainmen crossed the slough they would give me the distance, and I entered it and marked the outlines of the slough from that; that is something that always

1660 may be done in this kind of work, and it is not marked here except where in running a line the chainman crosses a slough.

Q—Then you did that marking wherever the chain crossed it, and you did not mark it wherever the chain did not cross it?

A—I marked it, as I tell you, where the chainmen crossed it; they would give me the distance to the slough.

Q—You marked that?

A—The points of that slough. In making my sketches, I would then make a mark where it crossed the section
1661 and sketch it in as well as I understood it.

Q—Wherever your lines did not cross the slough, you did not make any marks?

A—Well, as a matter of course.

Mr. Houghton—I will offer in evidence the field notes of Township 31 south, Range 25 east, Mt. Diablo meridian, certified to by the Surveyor-General of the State of California.

Defendant objects to the testimony as irrelevant, and not bearing upon any of the issues involved and not embracing the land described in the complaint; and further, as containing statements of fact which are not
1662 binding upon the defendant, or admissible against the defendant, and which are mere hearsay. And further, that there is no proof of its correctness.

Objection overruled. Defendant excepts.

(The paper is then marked by the reporter, Exhibit No. 20. J. W. G.)

[Here insert said Exhibit No. 20.]

Mr. Houghton—Now I offer the field notes of Township 30 south, range 25 east, Mt. Diablo meridian; certified to in the same manner.

Defendant makes the same objection to the testimony.

1663 Objection overruled and defendants except.

(The paper is then marked by the reporter Exhibit No. 21. J. W. G.)

[Here insert Exhibit No. 21.]

Mr. Houghton—I now offer the field notes of Township 31 south, Range 26 east, Mt. Diablo meridian; certified to in the same manner.

Mr. Garber—The same objection.

The Court—Certainly; to each of them, I understand.

Mr. Garber—It is understood Mr. McAllister. The same objection, ruling, and exception to each of these?

1664 Mr. McAllister—Yes, sir.

[The paper last offered is marked by the Reporter Exhibit No. 22, J. W. G.]

[Here insert Exhibit No. 22.]

Mr. Houghton—I offer the field notes of Township 31, South Range, 27 East, Mount Diablo Meridian, certified to by the United States Surveyor-General. Defendant makes the same objection to the testimony. Objection overruled, and defendant excepts.

[The paper is then marked by the Reporter Exhibit No. 23, J. W. G.]

[Here insert Exhibit No. 23.]

1665 Mr. Houghton—Township 30, South Range, 27 East, Mount Diablo meridian. Certified to by the Surveyor-General. Defendant makes the same objection to the testimony. Objection overruled, and defendant excepts.

[The paper is then marked by the Reporter Exhibit No. 24, J. W. G.]

[Here insert Exhibit No. 24.]

Mr. Houghton—Also Township 29, South Range, 27 East, Mount Diablo base and meridian. Certified to by the Surveyor-General. Defendant makes the same oblection to the introduction of this testimony. Objection
1666 overruled, and defendant excepts.

[The paper is then marked by the Reporter Exhibit No. 25, J. W. G.]

[Here insert Exhibit No. 25.]

Mr. Houghton—Also Township 29, South Range, 24 East, Mount Diablo meridian. Certified by the Surveyor-General. Defendant makes the same objection to the introduction of this testimony. Objection overruled, and the defendant excepts.

[The paper is then marked by the Reporter Exhibit No. 26, J. W G.]

[Here insert Exhibit No. 26.]

1667 Mr. Houghton—Also Township 28, South Range, 24 East, Mount Diablo meridian. Certified to by the Surveyor-General. Defendant makes the same objection to the introduction of this testimony. Objection overruled; defendant excepts.

[The paper is then marked by the Reporter Exhibit No. 27, J. W. G.]

[Here insert Exhibit No. 27.]

Mr. Houghton—Also Township 28, South Range, 23 East, Mt. Diablo Meridian. Certified to by the Surveyor General. Defendant makes the same objection

1668 to the introduction of this testimony. Objection overruled; defendant excepts.

[The paper is then marked by the Reporter Exhibit No. 28, J. W. G.]

[Here insert Exhibit No. 28.]

MILTON NORTON,

Called as a witness for plaintiff, sworn, testified:

1669 (To Mr. HOUGHTON)—I reside on Buena Vista Slough, about a mile and a quarter below Headquarter Camp, below the Wible Camp; it is on Section 15, Range 30 South, 24 East. I have resided there for two years last fall; I am engaged in running hogs there, and in farming, some; I am cultivating land there—a part of Section 10, in the same Township; I think it is the southwest quarter. I have been acquainted with the Buena Vista Slough since 1875; I crossed it going backwards and forwards to the Templor Ranch; we used to cross it at the old Tracy crossing; I probably crossed it during 1875 three or four times during a month; I was on
1670 the slough in 1876, crossing backwards and forwards going to the Templor. In 1876 we generally crossed at the old Tracy crossing; in 1877 I was in the swamp along Buena Vista Slough; I went there in 1876, I think.

Q—June, 1877?

A—Yes, sir. I first located about three miles above Dover's Camp, on the west side of the slough; I don't know what section that was I was on, but it was on what was called Smith's Pump; it was about three miles up the slough, and above Dover's.

Q—At what time did you commence to pump there?

1671 A—Commenced pumping in June, 1877, I think, and continued until March, 1878. I was attending to the pump and pulling cattle out of the mud-holes; that was about all.

Q—During the time you were there, between June, 1877, and March, 1878, along what part of the slough were you going in pulling those cattle out?

A—Well, we were from Wible's Camp; I think it is down about twenty miles.

Q—At what point would that be on the slough?

A—It would be below what is called the Fish Pond.

1672 Q—How often, Mr. Norton, would you be along the slough during those months?

A—Probably crossed them from one to ten times a day.

Q—For how long?

A—I think I was there nearly all the time; I had to go to all the different camps. I was not on the slough for five or six months after March, 1878; I went back in August in 1878; I then located where I am now living. My business since August, 1878, has been raising hogs and farming some.

Q—Where have you been running those hogs—be-
1673 tween what points on the slough?

A—Well, they run from Wible's down to the lower end of Weed Island; the lower end of Weed Island is not very far; probably three-quarters of a mile below Bonestell's.

Q—Do you know what was the condition of Buena Vista Slough between the place where it leaves Buena Vista Lake and the place where you have been running your hogs—three-quarters of a mile or a mile below Bonestell's—when you first saw it?

A—When I first crossed it, the first time, it was dry, except in holes.

1674 Q—Well, what was the dimensions? What was the average width of that slough between those points, when you first saw it?

A—I think it would average about 125 feet wide, and will average between 12 and 15 feet deep.

Q—What kind of banks has it during that distance?

A—Well, the banks for most of the distance are steep, and only at places you can cross.

Q—How did you cross that slough between Bonestell's house and Tracy's Crossing, when you desired to cross it, when it was full of water?

A—When it is full of water we generally have to
1675 swim it.

Q—Well, is it an easy stream to cross, or difficult?

A—No, sir; it is a very difficult stream to cross.

Q—How near does that slough run to your house?

A—It runs within 50 feet of the house.

Q—It has been running there ever since you have been running at that point?

A—Well, the water has not always been running.

Q—The slough is there; there is no change in the bed of the slough at that point?

A—No, sir.

1676 Q—Does the slough run through the land that you are on there—the west half of Section 10?

A—Yes, sir. I don't know as I can describe where it runs through Section 10; it crosses the southwest quarter, and crosses the line. We built a fence on the line; it runs north and south, and we had to cross the slough several times; the slough also crosses the northwest quarter of Section 10.

Q—Have you ever seen that slough between Buena Vista Lake and the Bonestell House when it was all dry?

A—I have seen it when it was, except in the water
1677 holes; water holes don't dry up.

Q—At such times how deep would it be down to the bed of the slough, or to the water, from the bank?

A—Well, it would be about, I think, six feet.

Q—What depth of water would you have to put in that slough between those points, before it would overflow its banks?

A—I could not tell exactly; I would think—Do you mean when the slough is dry?

Q—I mean how much water would you have to run above the bed of the slough, when it is dry, before the slough would overflow its banks?

1678 A—I could not tell exactly; I think about six feet, though. I have been along the banks of that slough recently.

Q—When?

A—I was there along the slough last Thursday.

Q—Where did you go on the slough first?

A—I went on the slough first about a mile from the adobe holes—below the adobe holes. From there I went north-west; followed the water down. We started from a little below the adobe holes.

Q—I was speaking about the slough, Mr. Norton, that you have been testifying to between Buena Vista
1679 Lake and Bonestell's House. Have you been on that part of the slough recently?

A—Yes, sir. I was there on Thursday.

Q—Where did you first strike the slough on Thursday?

A—The first—

Q—Between those places?

A—Between the Bonestell House—we came up by the Bonestell House; struck it by the—

Q—Did you strike it at the Bonestell House?

A—Yes, sir.

1680 Q—After striking the slough at the Bonestell House, where did you go?

A—We followed it up to where I live.

Q—How far south, following the course of the slough from the Bonestell House, is it to where you live?

A—I should judge it to be about 8 miles, following the slough.

Q—Was there any water in the slough when you were following it?

A—Yes, sir.

Q—What was the condition of the water at that time?

A—Well, it was running in the slough.

1681 Q—How much water was running in there at that time?

A—I think it was about three feet deep.

Q—Was it overflowing its banks at any place?

A—No, sir; I went along on horseback; I kept right along by the side of the slough all the time; I didn't cross it at all between the Bonestell House and the camp.

Q—Was that slough then the same, or about the same as when you first saw it?

A—Yes, sir.

Q—Have you recently been on the Buena Vista
1682 Slough, north of the Bonestell House?

A—Yes, sir; I was there last Thursday.

Q—How far north did you go from the Bonestell House?

A—I think I went about fifteen miles north of the Bonestell House.

Q—Was there a current to that water above the Bonestell House?

A—Yes, sir; there was a current there.

Q—Was there a current below the Bonestell House?

A—Yes, sir.

Q—How far was the water running in that slough
1683 below Bonestell's place?

A—About a mile.

Q—What was the condition of the slough at the place where the water ceased to run?

A—Right where it quit running it was not very deep when I was there; probably twenty feet from where it stopped running it was a foot deep and ten feet wide; a hundred yards from where it stopped running it was wider. At that point probably the slough was 100 feet wide.

Q—What occasioned the water to stop running at the point you have mentioned?

1684 A—Well, I suppose it was because the head was not large enough to force it any further.

Q—Then you say you followed down fifteen miles? How far down, after the water ceased to run at the point you speak of, did you go before you found water again, running water?

A—We found water about four miles below Dovers; that was the next place we found it. We found it at the break in the canal.

Q—What was the condition of the slough along the distance where it was dry. How wide was it?

A—I think about 125 feet wide, and from three to
1685 four feet deep on an average.

Q—Have you ever seen water running through that slough between the points mentioned; that is, between Bonestell's and the break you have spoken of in the canal?

A—Yes, sir; I have seen it running down the slough. I saw it running down the slough in the last of last February.

Q—You saw it running down the channel that you spoke of between Bonestell House and that break?

A—Yes, sir.

Q—How much water was running down there in Feb-
1686 ruary last?

A—Well, there were places where we crossed it, it was half side deep to a horse; other places it was probably three feet deep.

Q—Was it overflowing the banks when you saw it last February?

A—No, sir.

Q—You say you found water again down where the water run in from the break? Did you follow the slough down from that point?

A—We struck the slough about a mile below the
1687 adobe holes. We followed the road from the break to that point. We found there a stream of running water. We followed that till it run out about three miles below the adobe holes.

Q—What was the size of the slough where the water stopped running at that point; the channel of the slough?

A—I should judge it was about 100 feet wide. I didn't follow that channel below the point where the water stopped running.

Q—You stopped there?

A—Yes, sir.

1688 Q—Have you been down that channel below where the water ceased to run?

A—I have been below there.

Q—When?

A—I think it was in the spring of 1878.

Q—What was the condition of the channel then, wet or dry?

A—I didn't go to the slough very particularly. I have not followed the channel from the point where the water ceased to run, and down the slough. I have followed Buena Vista Slough from the break where the water runs out of the canal down to the adobe holes.

1689 The channel along there is probably 125 feet wide and from 3 to 5 feet deep.

Q—Have you ever been on Buena Vista Slough at any time with a boat?

A—Yes, sir.

Q—Where?

A—From Wible's Camp north on the slough, probably three miles and a half, following the slough. I have been down that slough in a boat, probably three miles and a half from Wible's following the slough.

Q—When the water was in the slough in February last, how far down did you go on the slough?

1690 A—Go down with a boat?

Q—No, sir; how far did you go down the slough? You said you went down in February last, when the water was in it.

A—I was down below Dover's.

Q—When you followed down the slough between those points—between your house and Dover's—last February, what was the narrowest place where the water was running in the channel?

A—I think the narrowest place must have been 50 feet.

1691 Q—Was it running at all points between your house and the point where you went?

A—It might have been; there below the drift pile there were different channels, and it might have been narrower; but in two or three different channels, taking them all together, there was no place less than 50 feet.

Q—How wide was the widest channel where the division took place?

A—You mean there by the drift pile?

Q—Yes; you say that the stream divided there, as I understand, and ran in two or three channels.

1692 Mr. GARBER—Where it divided, you mean; which was the widest of those channels, I suppose.

A—Well, the west channel was the widest.

Mr. HOUGHTON—How wide would that be?

A—I could not tell exactly how wide it would be.

Q—About how wide?

A—Probably that would be about 150 feet wide.

Q—Did those channels come together again?

A—It all came together, except one; there was one channel that runs down on the west side a considerable distance below; it may come in again below, but I don't know.

1693 Q—How far was it below the drift pile that the other two channels came together?

A—Probably a mile.

Q—Have you ever been down that channel you refer to, running around the west side of Weed Island?

A—I have been down—I have been on that channel below Dover's, and have been on it about Dover's, probably from a quarter to a half a mile above Dover's; that is on the west channel; I have been on that channel when the water was running in it.

Q—How deep and how wide was that channel upon an average from a point where it leaves the head of
1694 Weed Island to Dover's?

A—The channel on the west side?

Q—Yes.

A—Probably 125 feet wide in some places; some places more.

Q—What depth of water will flow through there before it will overflow its banks?

A—Well, I should judge the depth would have to be over three feet on an average. I have been on Buena Vista Slough above what is called Headquarters Camp.

Q—Do you know where Kern River runs into the
1695 slough?

A—Well, there is a branch of Kern River comes in abreast of the point where Buena Vista hills strike the slough; and there is a branch that comes in up at the old bridge.

Q—Have you seen the water running into Buena Vista Slough in both these branches?

A—Yes, sir.

Q—When the waters run into the slough from the most northerly branch, what direction does it run after entering Buena Vista Slough?

A—It runs north and northwest down the slough.

1696 Q—In what direction does the water run that runs into the southerly branch?

A—Well, that water divides.

Q—What do you mean by that?

A—Part runs into Buena Vista Lake and part runs down the slough.

Q—When did you first see those points on the river where those two branches enter?

A—I crossed there, I think, in 1875 and '6, I should say.

Q—How many times have you been there since?

A—Well, I could not tell. I have often been up
1697 through there.

Q—Every time you have been to the north branch you speak of there and found water running from that into Buena Vista Slough, what direction was it that water run?

A—It has run north and northwest.

Q—Have you ever seen it running in any other direction through that slough?

A—No, sir. I am working for myself.

Q—How many places are there on the Buena Vista Slough, between the old Tracy crossing and Bonestell's house, that you can cross the slough when it is bank
1698 full?

A—Well, if we want to swim, we can cross most any place, except down below the drift pile there.

Q—How many places are there, when it is bank full, that you can cross it without swimming?

A—Well, sir, I think there would be one place probably within a mile of the Bonestell house—a mile south. I have crossed the slough at the Bonestell house within a month.

Q—What was the condition of the water there when you crossed there?

A—Well, the last time I crossed there, I don't think
1699 the water was running. I have crossed there this year when the water was running, and the water was between three and four feet deep, I should judge; that was in February and March.

Q—At that time was the slough overflowing its banks?

A—No, sir; not where we crossed.

Q—Was it overflowing its banks at any point between where you crossed and the Headquarter camp?

A—Well, the slough when it gets high it runs out in different channels; when the slough gets about so high

1700 it will run around in different channels and come back into the slough again; whether you call that—

Q—What is that?

A—I don't know whether you would call that branch of it the main slough. I would call it a separate slough. There are different places where the water gets to a certain height that those—

Q—How high would the water have to get before it would flow out from the main slough into this side slough that you speak of?

A—Between three and five feet, I guess.

Q—What would be the effect upon those separate or
1701 side sloughs when the water receded and became only two or three feet deep in the main slough?

A—Those side sloughs; the water would run out of them into the main slough.

Q—Then the beds of the side sloughs were higher than the bed of the main slough?

A—Yes, sir; the main sloughs would drain out of the side sloughs.

Cross-examination of

1702 MILTON NORTON.

By Mr. HAGGIN. Q—You say, Mr. Norton, that where this water divides it is how deep at the head of Weed Island?

A—Do you mean how deep the slough would be, or how deep the water?

Q—How deep the water would be at the head of Weed Island?

Mr. MCALLISTER—You don't fix any date, Mr. Haggin.

Mr. HAGGIN—There is only one date I know of, in
1703 February last, or any date he has ever seen it divide there; I don't care what date.

Mr. MCALLISTER—At any date, then?

Mr. HAGGIN—At any date; when did you see it divide there?

A—The highest, I could not tell exactly when I have seen it the highest.

Q—I did not ask you the highest; I ask you when you saw it divide about the head of Weed Island?

A—Well, that is a place we don't ride through; I would have to judge it from when the slough was dry. I have seen the waters of the slough divide at the head

1704 of Weed Island; that is, not exactly at the head of Weed Island, it is above the head of Weed Island, probably a mile, in a southerly direction. That is what I call the drift pile; the water divides at the drift pile.

Q—Before the water flows through the east or west branch, how deep is it in the main channel?

A—Well, at the drift pile there is not much difference in the depth of the channels; they are all about the same depth there.

Q—Well, when the water comes down there it is just as apt to take one course as the other?

1705 A—I think it is, at the drift pile.

Q—And the main channel runs right through the drift pile?

A—In that west channel the water has got to raise up before it runs out on the west side; the water has got to raise in the main channel before it will go through the west channel; I think it will have to raise from three to four feet before it will go into the west channel. I think the width of the mouth of the west channel is about 125 feet.

Q—What sort of banks has it?

A—The banks are sloping.

1706 Q—How much do they slope?

A—Well, probably three or four feet deep in the centre, and sloping back to nothing.

Q—Sloping back to nothing; how far would you have to go back before they would get to nothing?

A—From the center?

Q—Yes.

A—You would have to go back half of 125 feet.

Q—How could you know when you came to the end?

A—Well, you could tell it by the looks of it, or tell it by the water.

1707 Q—Well, suppose there was no water there, how would you know? Suppose you want to go down there to-morrow and find it, how would you find it?

A—Well, I can find it.

Q—I know, but I want to know how I can find it, or any one else who was not familiar with the country?

A—Well, they would be mighty apt to know when they came to a slough, especially if it was boggy.

Q—You find it by its being boggy?

A—By being like a slough.

Q—What were the indications that make it look like a slough?

1708 A—It looks like a water course.

Q—What is the peculiarity of the thing that distinguishes it from anything else?

A—Well, I have seen water there.

Q—I do not question that. Suppose there was no water there, how can you go down there and find this channel you are speaking of? How can they tell when they come to this channel?

A—Well, if they were directed to this particular channel I suppose they would be directed there.

Q—Well, what direction would you give?

A—They could follow down the slough and the first
1709 water they struck would be that channel.

Q—You have said there was no water there?

A—Well, the first slough that they came to.

Q—What is there now to indicate that there is a slough?

The Court—Can't you describe it?

A—Well, it is from three to four feet and a half deep in the center.

Mr. Haggin. Q—You can see that conspicuously, can you?

A—Yes, sir; and the banks slope back probably
1710 125 feet. I cannot say exactly how far it slopes. The banks slope back 62 feet and a half from the center and rise 3½ feet, I think.

Q—How far to the outside of those banks?

A—There are places there where there are islands that are higher.

Q—So in places the banks get up higher?

A—Well, if you want to follow it you might follow it clear back to the hills; that would be still higher.

Q—So those banks would slope back clear to the hills?

A—I don't think they would. There are lower
1711 places outside those banks probably. The banks of the slough are gene ally highest grounds.

Q—Are there not lower places outside of the banks?

A—Some of them would be called sloughs and some ponds.

Q—What is the distinguishing feature of this particular slough from what you call the main slough and goes westward? What distinguishes that from a pond?

A—Well, the main slough has steeper banks.

Q—I am speaking of this slough that runs to the westward on the west side of the swamp land.

1712 Mr. McAllister. Q—At Weed Island?

Mr. Haggin—He says about a mile south of Weed Island. I have been trying to find some way by which I could reach it if I should want to go down there; but I cannot. I cannot get any definite description, I guess.

A—Well, I don't understand how you want it described.

Q—Well, if you were going to describe Kern River, you could describe that very easily. When you came to such and such a point, you would see such and such a feature, and if you would see such and such a branch,
1713 you could describe it very correctly and very easily now. I would like to know how you would describe this so that a stranger, going down to that country, following down that slough, would know when he came to this west branch that you speak of, when there was no water in the slough?

A—He would find it the same as you would any other slough or water course or river; find it as well as he could find Tule River or any other.

Q—Well, then there is no particular feature in that to indicate when you had come to it?

A—Well, I don't understand what you are trying to
1714 get at.

Q—In what respect does this 125 foot slough differ from the surrounding country, when it is dry?

A—Well, in one respect; you wouldn't see so many tules growing in there as you would outside.

Q—Is there anything else?

A—In some places there is steep banks, that show that water had been going through.

Q—I am speaking of this particular place, there on the west of where the driftwood is—west of the main channel. Is there anything else but the absence of
1715 tules to distinguish it?

A—Well, it looks like a channel.

Q—Exactly; that is what I am trying to get at. In what respect does it look like a channel? In what respect does it look more like a channel than any other portion of the swamp?

A—Well, it looks—because the water will run there and because it is a slough.

Q—But then I am supposing it to be dry, and no water running; I ask you, in what respect does it look different from the outside swamp, other than the lack of tules?

1716 A—Well, it may be after it leaves the slough there are places that one side is a bank, and the other slopes back.

Q—You don't know whether that is so or not?

A—Well, there is one place very close there, probably 200 yards from where it leaves the other slough, the bank is on the southeast side of the slough.

Q—You tell me that there is a channel running to the east, or an easterly channel from this drift-wood? How deep is that channel?

A—Three to five feet deep; in some places more.

Q—How far does that continue?

1717 A—It continues for a mile, I think.

Q—Is that a well defined channel as the westerly one?

A—Yes, sir; it is a more defined.

Q—How is it at the mouth where it leaves the drift-wood? What is the appearance there?

A—Well, it looks like a slough.

Q—The same sort of a slough as the other?

A—No, sir; there are more high banks to it.

Q—How high are the banks at the mouth?

A—Well, I could not exactly tell how high they were, but I should judge they are from four to six feet

1718 high. They are not exactly perpendicular; they slope a little, at an angle of 35 degrees, I guess. Of the three sloughs at that point, I could not tell which is the main slough, the center, the east or the west.

Q—Well, which one will the water run in first; suppose a small amount of water is turned down there, which channel will it take?

A—I could not tell exactly. It will either take the middle one, or the north one; that is the one to the right as you go down.

Q—You say, you were down there last Thursday? In

1719 which one was the water running?

A—It was running in both of them Thursday. It was not running in the west channel at all on Thursday.

Q—None in the west channel at all on Thursday?

A—No, sir.

Q—How was the water on Bonestell's place; was it confined to the channel, or not?

A—It was there by the Bonestell place, yes, sir. there was no water running out on the west side at all.

Q—Was the water running on the east side—was it all confined to those two channels, the centre and east channel; or what you call the north channel?

1720 A—There may have been a little water running out of the slough.

Q—Was there no water at all spread around over the country there at Bonestel's place?

A—There was none on the west side. There may have been a little on the east side, right there at Bonestell's. I was there, but I didn't cross the slough there; I didn't cross from Bonestell's to the east side of the swamp. In going from Bonestell's I followed right up the slough on the west side.

Q - Then for aught you know, the east side may have been entirely under water?

1721 A—I have been there enough to know by the water in the sloughs, to know whether it runs out or not.

Q—How was this middle channel compared to the east channel, or north channel as you call it? Is it as well defined as the north channel?

A—You mean by the drift pile?

Q—Yes, and from there on, take it first at the drift pile?

A—The main channel is well defined, if that is the one you are talking about. I call the main channel the one that runs down by the Bonestell house; that is the middle channel. And there is a channel on
1722 the east side of the swamp and a channel on the west side. I call the middle one the main channel, That is better defined than the eastern channel or the western. The three channels come together at the drift pile. From the drift pile there are three channels.

Q—They divide there. One runs to the east, one to the west, and one through the centre. Am I correct?

A—They come together again about a mile from there, except the west channel. There is a west channel there when the water is high, that don't come in there again. They divide, separate at the drift pile; I could not tell you exactly how wide the middle channel
1723 is at that divide; probably 50 or 100 feet—may be more.

Q—With perpendicular banks?

A—No, sir; the bank is not perpendicular. Probably in going 20 feet you would come to the bank from the bottom.

Q—Well now, during your following that middle channel down below the Bonestell place, how far before it ends?

A—Well, I couldn't tell how far before it ends.

Q—How far did you go down it?

A—The water was running down about a mile below

1724 Bonestell's place last Thursday. That is a little east or northeast of the end of Weed Island. It was very near the end—not far from it; I could not tell how far. It was very near the end of Weed Island. The water ended last Thursday very near abreast of where Weed Island runs down to a point. The Bonestell house is on Weed Island; the Bonestell house is between the main branch and the western channel.

Q—Between the middle branch and the western channel, and this western channel in following it down last Thursday, you found the water had ended at about the north end of Weed Island?

1725 A—The water in the middle channel. I said there was no water in the western channel at all.

Q—You said in your direct examination, that within 20 feet of the end the water was so many feet wide and about one foot deep—how wide did you say it was?

A—I think about 10 feet wide.

Q—About 10 feet?

A—Or 20, and coming back 100 feet further southward from where the water ended, it was about 75 feet wide.

Q—Had the water of the eastern branch joined it yet; the water that came around to the east, had that

1726 joined the centre?

A—The eastern branch came into the centre branch at the south end of Weed Island.

Q—Were the waters joining there—the waters of these two branches?

A—They joined together about a mile below the drift pile.

Q—They were then joined on Thursday, when you saw them?

A—Yes, sir.

Q—There was no water in the western branch at all?

1727 A—No, sir; there was no water Thursday.

RE-DIRECT EXAMINATION.

By Mr. HOUGHTON—I should judge that the eastern channel and main channel ran in separate channels about a mile, and they come together three or four miles above Bonestell's.

Q—You mean to say they separate and run apart about a mile, and then come together?

A—Yes, sir. I am farming down there, as well as hog raising. We raised no crop in 1879; I have been engaged in farming, probably about four years; I think

1728 I know what soil is necessary and requisite to raise a good agricultural crop.

Q—What is the character of the soil along Buena Vista Slough, from Headquarters camp down to the Tule House?

A—Well, down as far as I have been, I think it is as good land as there is in Kern County. I have been down to the Tule House, but I have not been there since I have been above there.

Q—How far do you speak of it as being good land, where you are familiar with it?

A—Down, probably, 24 miles below Wible's camp.

1729

RE-CROSS EXAMINATION.

By Mr. HAGGIN—I farmed in San Joaquin County, 15 miles from Stockton, near Farmington; I was not farming for myself; I was working on a farm.

Q—What sort of work did you do?

A—I helped to put the crops in and harvest them.

Q—What sort of crops?

A—Wheat and barley. I have a quarter section of land under cultivation on Buena Vista Slough, in alfalfa and barley. The land along Buena Vista Slough
1730 is some an adobe and a kind of rotting vegetation.

Q—How deep down does that go?

A—Some places, 12 or 14 feet deep; below the drift pile you can find rotting vegetation 12 or 14 feet deep. I commenced plowing on Buena Vista Slough in 1878.

Q—How many crops have you raised?

A—I raised a crop last year, and there is a fair prospect for one now. I never farmed for myself before coming there. My crop this year is on Section 10, the S. W. ¼. I could not tell exactly how many acres; I never measured it; very near a quarter section, though. It is all in barley and all in alfalfa. I am renting the
1731 lands, and last year the crop was alfalfa and barley. We cut some of it for hay, and let the hogs harvest the balance. We cultivate that land for hogs and stock business. I didn't get a separate crop of barley from the general mixture of barley and alfalfa; we cut it as mixed hay. Last year it was sowed first, and the alfalfa was short, and when we cut it I don't suppose we got 100 pounds of alfalfa hay in cutting 60 acres, it was so short.

Mr. HOUGHTON. Q—What crops did you have in 1878?

A—We plowed in 1878. Year before last we didn't

1732 have any crop, we didn't put any in. We were ready to put in a crop, but didn't see any prospect for water.

Q—What was your reason for not putting in a crop year before last—1879?

A—I didn't have any water. I didn't think there was enough water to raise a crop year before last. There was a little water got down, but I don't think it raised high enough to irrigate with. The reason of the short crop of alfalfa was that it was young and had not grown yet, and the barley got ripe and we cut it. There was plenty of water there in the spring of 1880. There was no water there in the fall of 1880. After I
1733 got the barley crop we had no water in the alfalfa after that. I leased that property from Miller, Lux and Crocker.

ROBERT BURGAN,

Called as a witness for the plaintiff, sworn, testified:

I reside in Kern County on the Panama Ranch, six miles southwest from Bakersfield. I have been on Buena Vista Slough. I have worked there. I was there at work in 1877, in the fall, for Mr. Crocker. I
1734 think I worked up there about a week. I was working with cattle. I went there in the spring of the year 1875. I don't know how long I remained. I was at work along, up and down the swamp, I believe, once or twice in the spring. I was there about a month each time—I think about a month—sometimes longer and sometimes not so long. I was working with cattle. I was there in the fall of 1875. In the fall I worked there the same length of time. I was working from the head of Tulare Lake to Tracy's crossing, and I was crossing the slough at different points.

Q—How many times would you cross the slough in
1735 making a trip up there in a month—or down?

A—I could not tell exactly. Smetimes I would cross once or twice in working backwards and forwards on horseback. I would cross it may be a dozen times. During the whole season of 1875 I suppose I may have crossed the slough 8 or 10 times. I was there again in 1876 working stock.

Q—How long were you there in 1876?

A—From early in the spring to, I think, some time in June. I was there most all the time. I think I was there about 4 months. I was there working with stock. I was there again in 1879. I was not there in 1877 or

1736 1878. I think I got there in March, 1879, but I won't be certain. When I was there in the early part of 1876, I was working with cattle. I was working from Tulare Lake up to Tracy's crossing, and I was crossing the slough at that time. I crossed it quite a number of times that year.

Q—At how many different points?

A—I crossed it most of the time down at the Tule House. It was in March, 1879, I think, that I went there again. I think the first work I did was putting in a pump; I think it was in April. I don't know how many pumps I put in myself; but I think I had seven
1737 put in.

Q—Had seven pumps put in?

A—I had five put in. I was working for Mr. Crocker.

Q—What were they using the pumps for?

A—Watering stock and cattle. The condition of the water in the slough at that time was very low.

Q—How long did you remain there after March, 1879?

A—Well, I was there and away from there pretty much all of the time during the winter, and lately a few times backwards and forwards.

1738 Mr. McAllister. I don't hear what you say.

A—I was there most of the time backwards and forwards, attending to the cattle and pumps, during 1879, and pretty much all the winter. I was there in the year 1880.

Mr. Houghton. What were you doing there in 1880?

A—I was running one or two pumps along earlier working with cattle—rodeoing—gathering stock and branding cattle. I was working cattle between Tulare Lake and Tracy's Crossing. I crossed the slough a number of times.

1739 Q—Who were you working for then?

A—I was at work for Mr. Crocker. I was using the pumps in the early part of 1880, pumping water for the cattle. There was no water there at all at the lower pumps, below the adobe holes.

Q—How far did water run down the slough during the year 1880?

A—I don't know exactly how far it ran, but I don't think it ran any further than Dover's.

Q—Did it reach the adobe holes at all during 1880?

A—I think it did; but I am not positive, because I was not there all of the time.

1740 Q—How long, if at all, did the water continue to the Adobe Holes in the year 1880?

A—It got there to the adobe holes along in the summer, but I don't recollect how long it remained.

Q—Well, about how long?

A—There was water there from that on.

Q—The balance of the season?

A—Since 1880 there was no water there in the winter time—that is, as low down in the swamp as I was pumping. I don't think there was any running water as far as the adobe holes, on the 1st of January, 1881; there was standing water there. When I came there in
1741 1879, there was no running water at the adobe holes, only standing. The water was standing there when I came there in 1879. I came there in March, 1879. I don't think we got any water down there until sometime in the spring of 1880.

Q—Did you have any water there at all during the year 1879?

A—None only in standing ponds. I didn't see any running water. I was there off and on all the time, may be once a week, and sometimes I wouldn't be there right along for a week. I would be there upon an average once a week from March, 1879, the balance of
1742 the year. During that time I didn't see any water running past the adobe holes that I recollect of. The adobe holes I think are 10 or 12 miles below Dover's camp—north of Dover's camp.

Q—Have you ever seen the water running all the distance from Buena Vista Lake to Tulare Lake?

A—I think I have in 1876.

Q—What was the condition of the channel?

A—I didn't see it running all of the way, but I seen it whenever I was on the slough running, and I suppose I was on the slough at 50 or 100 different places.

1743 Q—When in crossing the swamp land there along the slough at those places did you always find the slough?

A—Where I cross I always find sloughs.

Q—What was the condition of that water in the slough?

A—That year it was always swimming when I found it. They were swimming where I crossed them. The water was running where I found it in these sloughs; running north.

Q—What is the average size of that slough—the main slough from Tracy's Crossing down to the Tule House?

1744 A—It would average 80 or 100 feet.

Q—How deep will the water run in it as a rule before it overflows its banks?

A—Well, where I generally made my crossings it would be about 6 feet; where I generally made my crossings.

Q—Then at the lowest place, about what would be the average?

A—Where I have been on the slough the lowest place would be 2 feet; that would be the shallowest place on the slough in the channel.

Q—When the water running down Buena Vista
1745 Slough is confined to the channels how much of the land—what proportional part of the land—is covered by water?

A—I could not say for certain, but there is a good many places. Where I generally cross, we always hunt the deepest part of the slough on account of the water. Where I generally cross, it is not the widest, on account of hunting where it was not very wide to cross.

Q—I will put the question in another form. When the sloughs are full of water, and the water is confined to them, what proportion of the lands can you run and
1746 feed your cattle on?

A—I don't think it would be over one-sixth but what we could feed there. We could feed our cattle over all but one-sixth.

Q—What was the effect on the feed of having water at the lower end of the slough during the year 1879?

A—It would have a great deal of effect on it.

Q—Are you acquainted with the channel that runs from Salt Slough on the east down to the Tule House?

1747 A—Yes, sir.

Q—What is the size—what is the width and depth of that channel between those points?

A—About 100 feet in width I think, where I have been on it, and it will average 6 feet, I think, in depth. I never rode through that channel all the way. I have been right along the edge of the channel and been in it for quite a distance in places.

Q—Can you travel in the channel between those two points?

A—I think a man could.

1748 JAMES D. SCHUYLER,

Called as a witness for plaintiff, sworn. Testified:

By Mr. HOUGHTON—I am a civil engineer. I am assistant to the State Engineer.

Q—Do you know what the elevation of Tulare Lake is above the level of the sea?

A—I don't know it of my own knowledge; I know it approximately.

Q—You know the difference in the elevation of Tulare Lake and Buena Vista and Kern Lakes?

A—Not of my own knowledge. I have made some
1749 inquiry on the subject but have never run a line of elevation over the route. I have never taken the elevation of Tulare Lake. I do not know the elevation of Summit Lake; never was there.

S. W. WIBLE,

a witness called for plaintiff, being sworn, testified as follows:

I am Superintendent of the Kern Valley Water Works.

Mr. HOUGHTON—Q—Have you any other business?

1750 A—I have got some farming operations. Have been farming in this country since 1875. Have been farming ever since, off and on. I reside now at headquarter camp of the Kern Valley Water Company which has been referred to as Wible's headquarters during this trial. I have lived there since the Fall of 1876.

Q—What was the condition of the river when you went down there in 1876—Kern River?

A—Well, there was—do you have any particular point?

Q—From where the river enters Buena Vista Slough?

A—I cannot say just exactly; there was water there.
1751 There was considerable water running in the slough.

Q—How many branches of the waters of Kern River run into Buena Vista Slough?

A—Three branches.

Q—How many branches were there at that time running into Buena Vista Slough?

A—I think the same branches were running at that time; that is, I don't think there was water running in all of them. I think there was water probably in the main one; the main branch which carries most of the water

1752 is the central, which goes in right at the point of a hill. The northern branch runs into Buena Vista Slough a little north of that. That northern branch, when I first saw it with water in it, the water was about 20 or 25 feet wide. I first saw that branch either in the latter part of 1875 or of 1876. The water was then running in it either 20 or 25 feet wide. I cannot give the exact date, but it was before I went on those Works that I was on the northern branch. And there was water running when I went down to it. If it was the same year that I went there, it was before the 1st of October, or about the 1st of October; but I think it may have
1753 been in 1875 that I was at that slough. I was not there before 1875. The water that ran into Buena Vista Slough from that north branch after entering Buena Vista Slough, would run northwest down through that slough. I first saw water running down the center or main channel in the Fall of 1876.

Q—Where did those waters run after they entered into Buena Vista Slough?

A—They ran north.

Q—Through what channel?

A—Buena Vista. I first saw the waters running through what is called the south channel of Kern River
1754 in 1876.

Q—Which way did the waters run that went into that channel after running into Buena Vista Slough?

A—They were running north at that time.

Q—When you have seen the waters running down the northerly channel of the three—the main northerly channel of the three—since then; since this time, 1876, after running into Buena Vista Slough—which way did the waters run?

A—Runs north.

Q—How is it as to the central channel when the waters have been running through that?
1755 A—Running north.

Q—How is it since 1876? Where would the waters run that have been running in the southern channel?

A—Well, they divide at the present time.

Q—When they divide, where do they run?

A—One runs into Buena Vista Lake, a portion of it, and a portion of it runs north through Buena Vista Slough.

Q—How far down Buena Vista Slough have you been from what is known as the Old Tracy Crossing on

1756 Buena Vista Slough? How far north from that point have you been?

A—I have been down to Tulare Lake. I have been down there 2 or 3 times, 3 or 4 times. Once only I was clear down to the waters of Tulare Lake. The other times I went down as far as I could go for the bog or swamp land around Tulare Lake. The last time I went down was in June, 1877.

Q—How many times have you been down Buena Vista Slough from the old Tracy Crossing to the Bonestell House?

A—Well, I can't keep account of the number of times
1757 I have been there. I think I have been down there every year since I have been on the Works.

Q—What kind of a slough or channel is that from the old Tracy Crossing to the Bonestell House?

A—It is a deep channel.

Q—How deep do you think? How deep on an average?

A—Well, it would not be probably less than 7 feet on an average or 8 feet. It is very much deeper in places. I have found places where it was 20 or 25 feet deep, and it is from 50 to 150 or 200 feet wide.

Q—Have you ever been down that channel in a
1758 boat?

A—I have been a portion of the way.

Q—How far?

A—Well, not below Headquarter Camp; not very far. I have had boats down below, that I have been in down a mile or two. I know where Mr. Norton lives who was last on the stand, and know the channel where it runs by his house. At that point the channel is 125 or 150 feet wide.

Q—Do you know the channel where it runs through the northwest corner of the section he is on?

1759 A—Yes, sir.

Q—How wide is it at that point?

Mr. Garber—That is Section 10, isn't it?

Mr. Houghton—Yes, sir.

A—50 or 60 feet; in some places 100, I think. I have often crossed the channel of Buena Vista Slough. I have crossed it above headquarters. I used to ford it there. At Tracy's Crossing I have crossed it very often. I have crossed it below headquarters. I have crossed it right at Headquarter Camp. We had a crossing there, and have crossed it to Weed Island.

1760 Q—At how many different points?

A—Well, I could not say exactly. We had an old crossing there on Weed Island. I have crossed it there very frequently. I have crossed it at the Bonestell House, just above his place on section 24.

Q—Have you crossed the channel below there?

A—Yes, sir.

Q—How far, and at what points?

A—Well, I could not tell you at what points. Just as my business required me crossing back and forth on the swamp?

Q—How many points below Bonestell's had you
1761 crossed the channel?

A—At a great many places.

Q—About how many?

A—Well, do you include the whole distance, or between any particular points.

Q—I say below Bonestell's house at how many different points have you crossed?

A—Well, I have my camp down there, and crossed it and crossed it so often, that it is impossible for me to tell.

Q—In making those crossings, would you make them
1762 at one place, or at some other places?

A—I made two crossings there for the purpose of hauling freight from Delano. I was last on the portion of Buena Vista Slough, south of the Bonestell House, only two days ago. I crossed at the Bonestell House. That was the 24th I believe, on Saturday last.

Q—How wide was the channel where you crossed it at the Bonestell House?

A—Well, it must have been 40 or 50 feet wide.

Q—How deep was it?

A—Well, it did not come right into the buggy bed, I should judge 3 feet or 3½ feet, probably. It might have
1763 been a little deeper than that. It might have been a little less. I was there in a buggy.

Q—After crossing the channel where did you go?

A—From there I went up to headquarters, followed the channel right up, driving right along on the banks in most places. Once in a while would come into a bend and strike across.

Q—Where you would drive across those bends at any time how long would it be that you would not see the channel?

1764 A—Oh, I could see the indications of it all the time, very little way from it.

Q—What was the longest distance you were away from the channel so that you could not see it?

A—Oh, it was about—I was often right close to it when weeds or something of that kind would hide it from me more than the distance really. Probably would be sometimes 100 yards. I could not tell exactly.

Q—At what distance, the greatest distance would the channel be out of your sight as you drove along there?

A—A very short distance going across these short bends, probably 100 yards across a bend, might be 100
1765 yards from there into the bend. There was but very little channel but what I could see. In going from the Bonestell house on the channel to headquarters there might have been a quarter or a half a mile of the channel that I did not see.

Q—Did you find in driving out there any places and spots, and if so how many, where the water would overflow the banks of the channel?

A—There was but one place, or probably two places, where the water had run out a little. One place I ran around it and the other I went across it just a little bit.

1766 Q—How wide was it and at what point was it that the water was running out that you crossed it?

A—Well, it was just running out over the banks. I think I drove into it and then drove out again, just above Weed Island. There was one little place down on Weed Island where there was a high water channel or something running out a little ways. I don't know how far, but a little ways, just barely run enough to wet your feet.

Q—Was it 100 yards or half a mile in that middle channel, the first one you came to after leaving the Bonestell house?

1767 A—The first that I crossed, I could not tell how far it ran; but it did not run far for the reason that I afterwards ran around the end of it. It might have run out two or three hundred yards. Where I crossed it, a small stream probably six or eight inches deep.

Q—Then you say you reached a point again at the head of Weed Island where the water was running out. How wide was it where it was running out at that point?

A—Well, I didn't get right up to the slough. I did too—I went up to one side where it was running out. Then I went around it and came to where it was run-

1768 ning out again. Whether it was all solid water running between that I could not tell.

Q—How wide was it between those two points?

A—Well, probably 200 or 300 feet, maybe 200 feet. I could not tell exactly. I drove around and across it. I was probably 100 yards from the slough when I crossed it.

Q—How deep was the water at any point when you drove through there?

A—Well, when I drove through it was just in the channel—the western channel there. It was just entering that, and I suppose where I crossed, probably there
1769 was a foot of water in there.

Mr. GARBER—Q—You mean at the western channel?

A—Yes, sir; it was just entering into that.

Mr. HOUGHTON—Q—Then the water that was running out of the slough, was that at the mouth of the western channel?

A—That was at the mouth of the western channel.

Q—After crossing that point, did you find any more water running out of the slough over the banks?

A—No, sir.

Q—How far did you say you went?

A—I went to headquarters.

1770 Q—What was the distance that you drove along the banks of the slough in that swamp, following the meanderings of the slough?

A—Well, I really don't know; probably 12 or 14 miles.

Q—What was the condition of the water in the slough?

A—There was quite a body of water running in it there. Where we crossed it below, there was three feet and a half of water anyhow—running water.

Q—What was the condition of the slough above as
1771 you approached the headquarter camp?

A—Well, it was deeper as you go up.

Q—Then I understand you to say that you started from Bonestell's house?

A—Yes, sir.

Q—And followed the channel around to headquarters?

A—Yes, sir.

Q—When were you last on the western channel of Buena Vista Slough?

A—The same day when I crossed it—last Saturday.

Mr. GARBER—Q—What channel was that?

1772 A—The western; west of Weed Island. I crossed the west channel right where it leaves the slough, or close up there. I have been on the western channel since then.

Q—Where did you strike it?

A—The first place that I drove on to the bank of the channel, west channel, was near the adobe holes, which is about four miles—four or five miles—below Dover's Camp.

Q—What was the condition of the channel when you first drove on to the banks of it? Was there water in it, or not?

1773 A—Yes, sir; there was water in it. I don't know how deep it was. I suppose there was five or six feet of water right in the adobe holes.

Q—I am speaking of the place where you first struck it?

A—I could not tell you how deep the holes is altogether, but there was two feet and a half more water than there was two weeks ago. I am mistaken about the distance from the Dover Camp to the Adobe Holes. It is about eight miles. It is eight miles from Dover's where I first struck the western slough.

Q—What is the condition of the slough there?

1774 A—Plenty of water there, and running north.

Q—Where did you next come to the slough?

A—Drove right on to the edge of the bank at the Adobe Holes.

Q—What was the condition of the water there?

A—Lots of water there; wide and deep.

Q—Was it running?

A—Yes, sir.

Q—Where did you go to from there?

A—Then I went and struck the slough or channel at the Adobe Chimney Camp of Miller & Lux, or Crocker's Camp, about four miles below the Adobe Holes.

1775 Q—What was the condition of the channel of the water there?

A—The channel was dry there; no water running.

Q—Did you follow the slough any further?

A—Yes, sir.

Q—How far?

A—Well, below the channel there a very little. Then the next place I struck the channel at Epperly's Camp; that is three or four miles from the Crocker Camp. Then I followed the channel right on from there. It

1776 was nice driving right in the channel; must have followed it some three or four miles. Where I first struck the channel and there was no water, the chaunel was wider and deeper than at the place where I first struck it.

Mr. HOUGHTON—Q—What was the average width of it from the place where you first came to it until you left it.

A—Well, I guess it would average a good deal over 100 feet. Then the average depth to the point where it was dry was 4 or 5 feet in some places; others, 10 feet. The point where I first reached the slough, and there was no water, was on Section 20, in Township 27
1777 south, range 22 east. No, that is the point where I first reached it and found water. The first point that I reached the slough and found no water was section 31, in Township 26 south, range 22 east.

Q—How far did you follow that dry channel from that point?

A—Left right here, come on here, then took the channel about here somewheres.

Q—Where is that?

A—That is on a line between Section 24 and 15, in Township 26 south, Range 21 east.

Q—Then how long did you follow along the dry chan-
1778 nel?

A—Well, 3 or 4 miles to a point very nearly opposite the Tule House. It was not all the way dry. There was a big, deep channel there, and I don't know how much water there was standing in it. There was no running water. I followed the channel where I found no running water, 3 or 4 miles down to Section 36, in Township 25 south, range 21 east; and from there I went to the Tule House.

Q—What was the condition of the channel that ran from the west channel to the Tule House when you
1779 crossed there?

A—Dry. It was from 50 to 75 feet wide when I made any note of it. It was deep. It was a deep big channel at its intersection. I did not follow it. At the Tule House I found the eastern channel. There was water there, standing water, no running water. From the Tule House I followed up the eastern channel. I drove right in the channel, in the bed of it; not right from the start; after I got a little above the Tule House I drove right into it. It was a little damp at the bank. After I got a little ways above the Tule House I went

1780 right into the channel. I drove probably a half a mile from the Tule House, and then drove right into the bottom of it. Then followed right up the channel.

Q. How far along the channel of that slough did you drive after leaving the Tule House?

A—I drove two hours?

Q—Did you, in driving along that channel, come to any running water, or not?

A—Yes, sir.

Q—Where?

A—Above Salt Slough. It might have been on a direct line a mile and a half or two miles above Salt
1781 Slough, where I came to running water. That would be on the map somewhere in Section 33, in Township 26 south, Range 22 east.

Q—What was the condition of the bed of that channel where you drove along?

A—Well, it was dry. Very fair driving right at the bottom of the slough.

Q—As to its being regular and even?

A—A very nice, even channel.

Q—How wide was that channel from the Tule House to where you struck the water?

1782 A—I should judge it is—where the bank is perfectly clear and smooth with the exception of a little growth of weeds that was growing in it, just starting up from the moisture right straight across, it would average 75, or probably 100, feet.

Q—What was the growth in that channel?

A—Nothing at all except occasionally a little duck clover or smart weed, or something of that kind.

Q—What was the distance that you drove along that channel from the Tule House before you struck the water?

A—Two hours.

1783 Mr. Garber. Q—That is, that two hours drive?

A—Two hours drive. I drove probably, well, it must be 12 miles, anyhow; it might have been more and it might have been less. I was more than two hours driving it. I think it was two hours and a half.

Q—How deep was the channel upon an average where you drove along its bed in the buggy until you struck water?

A—The clear channel was about from three feet and a half to four feet deep on an average, I guess.

1784 Q—Did you in making your drive keep in the channel all the time?

A—Yes, sir.

Q—What was the appearance of the first water that you came to in that channel?

A—Well, the water was clear and running.

Q—Rapidly?

A—Yes, sir; it was moving right along.

Q—How long did you follow up the channel after striking water?

A—I drove right along the water until I struck the channel that came in from the western channel, and crossed
1785 that, and followed right on up the channel. There was room enough along the water to drive in, except where it was too steep.

Mr. McAllister—I do not understand whether he was driving up the slough or coming up this way?

Witness—Coming up. The water was running down the stream.

Mr. Houghton. Q—I understand you to say you came to water somewhere in Section 33, Township 26 south, Range 22 east?

A—Yes, sir.

Q—How far, please designate on the map, was it
1786 that you drove along on the side of the channel by this running water from Section 33?

A—I drove off in there somewhere. (pointing.) That is Section 33; then I followed this channel and crossed the channel. I followed this east channel above the point designated on this map, that to the south end of Section 27, in Township 27 south, Range 22 east.

Q—What was the condition of the water along that distance?

A—Well, after I got into Goose Lake, or opposite there, the water spread some, and I went to see where
1787 that water came from. I followed it on the west side, keeping so that no water could come in from the west unless I saw where it came from. I didn't find any water coming in from the west. I kept the water all to the east of me, as I drove up to where the channel came together in about Section 28, Township 27 south, Range 22 east. It might possibly have been in Section 31 that I found some water.

Q—Did you ascertain where that water came from that was running down there?

A—Yes, sir. After I came up above the Township 27,

1788 Range 22, I crossed that channel to the eastern bank until I came onto dry ground. Finally I was not satisfied; I went to high ground; land that showed no signs of overflow. Then I turned and went back west until I struck water and kept it on my right hand, still going southwest until I came to the high ground, somewhere down in here.

Mr. HOUGHTON—The question was if you ascertained where that water came from.

A—Yes, sir.

Mr. MCALLISTER—He says he did; but he didn't tell us where it came over.

1789 A—I ain't got through yet with that. I passed down on the west side of the swamp. I came out and I passed down on the west side of the swamp and crossed water flowing into the tules from the canal. Crossing that, then I was on the west side of it. This water which I saw came from the canal.

Mr. HOUGHTON—Did it come from the break in the canal down there?

A—Yes, sir. It ran out of the canal. I am positive of that.

Q—To that east channal and down it?

A—Yes, sir.

1790 Q—What canal do you refer to?

A—The Kern Valley Water Company's canal. That break in the canal is between 19 and 20 miles below Headquarters or the head of the canal, or where it leaves Buena Vista Slough.

Q—How far along in miles did you follow that slough where the running water was?

A—I think I drove up four hours—three or four; about four hours, I think, after I struck running water.

Q—Can you designate at what point on that map you went to the slough and found water coming in from the west?

1791 A—I can't say exactly on this map where, but it must have been somewhere about Section 4, Township 28 South, Range 22 East, and I went that distance along the water.

Q—How far along that slough did you ride before you found any water outside of the banks from the slough?

A—Well, probably 15 or 16 miles.

Q—I mean from where you first came to water, where it would be outside of the banks?

1792 A—I found some water in this delta here, coming from Goose Lake, about three miles probably, up here opposite Goose Lake.

Mr. GARBER—Let me see if I understand that. You mean to say from the point where you first came to water to where you first found any outside of the bank, was about three miles?

A—I think it was. I traveled that far before I found any water outside of the bank. I drove in the channel right alongside the water.

Q—What was the average width of the channel where you found it, and the water running in it?

1793 A—Probably from 50 to 75 feet. It was wider where I first found the water.

Q—What was the depth of the channel?

A—I can tell better about the depth where there was no water, than I can where there was water, although I was actually across where there was water.

Q—Where did you go after crossing the point where the water ran in from the west?

A—I followed right on; followed on up.

Q—What did you find above that point?

A—Well, I found a place where the water was running over the banks. I also—

1794 Q—(Int.) No, I ask you: What did you find in the way of a channel or water after you left the point where the water came in from the west?

A—Well, I crossed that channel and followed right on up the east channel. There was water in it—running water.

Q—I ask you what you found after you reached the point above where the water run in from the west?

A—Well, the water was running north.

Q—How did the water get there to run north?

A—It has to come from the break in the canal; from the canal to get over there. After passing the point
1795 beyond where the water came in from the canal going south, there was no more running water. I found a channel there, and where I crossed it, it was dry. I went around the point where the water came in, and got above it, and from there I went to high ground on the outside and went right up to the road.

Q—What is the average width of the main channel, running from Bonestell's house down to the Adobe Holes?

1796 A—Well, that I can't say that I followed that or ever drove over that channel; I drove over a portion of it.

Q—What was the average width where you have seen it? You say you have crossed repeatedly at different points?

A—Yes, sir; I followed up the water.

Q—When you have seen it and followed it, what is the average width of it?

A—Well, the channel is—I didn't make any particular note of it, but I judge it is somewhere from 50 to 75 feet—from 40 to 75 feet.

Q—What would be the average depth of it?

1797 A—Well, 3 to 3½ feet.

Mr. GARBER—Which did you follow—which channel there? Which do you call the main channel?

A—Well, the channel I was on.

Q—Is it east, or west, or what?

A—It must have been below the Bonestell House.

Q—I want to know the channel you call the main channel?

Mr. HOUGHTON—Was that the continuation of the main channel running by Bonestell's house?

The Witness—Yes, sir, it was; to the best of my knowledge.

1798 Mr. MCALLISTER—The east channel then.

Mr. HOUGHTON—Which side of the Broder Island does the channel run there?

A—That channel was to the west side of Broder Island. In referring to the maps in connection with the trip taken in the buggy along those channels, I refer to Map No. 3 and also No. 2. I superintended the construction of the canal of the Kern Valley Water Co.

Q—What effect, if any, has the construction of those canals in preventing the water from running down Buena Vista Slough?

1799 Mr. MCALLISTER—You mean of this Kern Valley Water Company's Canal?

Mr. HOUGHTON—Yes, sir.

The Witness—A—Well, I take water out and turn it in, just as I see proper.

Q—What effect has it upon the escape of the water down Buena Vista Slough?

A—It don't interfere at all.

Q—Can you take out any water in that canal that does not eventually go back to the slough?

A—No, sir.

1800 Q—Where is the first gate or weir through which water runs from that canal?

A—It is right in the bed of one of the channels of Buena Vista Slough, on section 15. It is right close to the head of the canal. One corner of that gate is right in the old slough, Buena Vista Slough. Buena Vista Slough forks and runs around a little island. One branch I closed up, and built the head-gate right near to that one.

Q—Then the water, instead of running through two branches, runs through a head-gate that is built in one of them?

1801 A—Yes, sir.

Q—How does the bed of that gate compare with the bed of the slough before you disturbed it?

A—Well, it is lower, lower than the bed of the slough was.

Q—How many gates are there from which you can let water out along that canal, how many gates in all?

A—Six, I believe.

Q—How far is the second gate from the first gate, referred to as situated in the slough?

A—Well, the way I remember them, I call the main head-gate that I built before in the slough, I call that 1802 the first head-gate; but I have a gate still east of that. This other gate that I have is a half mile east of the head-gate.

Q—If you should permit the water to run through that east gate, where would it run to?

A—It would run back into the slough.

Q—Then where is the next gate west of the head-gate?

A—That is a mile and a half below.

Q—How far is the third gate from the second gate?

A—Two miles and a half below the second gate, which 1803 is a mile and a half from the head-gate.

Q—If you should turn the water out of that gate, where would it run to?

A—Well, I used that gate for an irrigating canal, but when I just turn it loose, it runs right back into the west channel of Buena Vista Slough.

Q—Where is the fourth gate?

A—That is about four miles below Headquarters Camp, and two miles and a half or three miles below the third gate.

Q—When you turn the water out of that gate, where does it go?

1804 A—It goes right out into the slough.

Q—Where is the fifth gate?

A—Six miles below the fourth gate.

Q—If you turn the water out of that gate, where does it run to?

A—Right out into the slough. The sixth gate is about eight or nine miles below the fifth.

Q—If you should turn the water out of that gate, where would it run to?

A—Run back to the slough. There is no other gate beyond that. The break is beyond that, and the canal extends beyond that gate and beyond the break five
1805 miles, I should think. We have no gate at the end there.

Q—What have you there?

A—It runs right back into the slough.

Q—Runs right to waste there—nothing to stop it?

A—Yes, sir; it runs right in the slough. They made a cut right out, so that the water runs right back in the tules right into the slough—cut a channel or waterway right out to the slough.

Q—Where does all the water run which is now running into your canal?

A—It runs through the canal.

1806 Q—Where to?

A—Into the slough and into the tules right into the west channel of Buena Vista Slough.

TUESDAY, April 26th.

Testimony of

S. W. WIBLE,

Resumed.

Q—Is there at present any water running from Kern River into Buena Vista Slough?

1807 A—Yes, sir.

Q—Through what channel does it run and empty into that slough?

A—It runs through the south channel.

Q—What direction does that water run after it reaches the channel of Buena Vista Slough?

A—It divides, a portion of it running south and a portion of it runs north.

Q—Where does the water run that runs north?

A—It runs from Buena Vista Slough towards Tulare Lake. There is no water now running in the centre or

1808 main channel, as I call it. I don't think that any has run in that channel this year.

Q—When did the water last run in that channel, the middle or main channel?

A—In 1880, I believe was the last. I think it was in 1880. It was the time of high water.

Q—What, if anything, has caused the water to cease running in that main channel?

A—There is a dam thrown into the main channel that turns the water into the south channel. I don't know when that dam was put there.

Q—When did you see it there first?

1809 A—I saw it there about the 1st of April, 1881.

Q—What has been the effect upon the channel of New River of taking water from it above by these canals?

A—On the channel above?

Q—On the channel below. What has been the effect on the channel below the canals by reason of tak ng the water out of the river into the canals?

A—Well, it has dried up, and there is brush and trees that is cut and put into the river, floated down and lodged on sand bars.

Mr. Flournoy—What canal is he talking about?

1810 Mr. Houghton—I refer to it generally, taking the water out above.

The Witness—And willows growing.

Q—Willows growing where?

A—Right in the channel along in the channel of Kern River.

Q—What is the condition of Buena Vista Slough now as regards depth compared with what it was when you first went there in 1876?

A—A portion of it has filled up with sand and sediment.

Q—What, in your judgment, was the cause of the

1811 filling of that ch nnel that you spoke of?

A—The water running irregularly down Kern River and washing there. Not sufficient when it just came for any length of time to clear the channel of Buena Vista Slough.

Q—What was the condition of the water in Buena Vista Slough when you first went there in the year 1876?

A—There was water running in the fall of 1876.

Q—What was the condition of the waters then in Lakes Buena Vista and Kern?

1812 A—The lakes were full.

Q—What was the condition of the water in Buena Vista Slough during the year 1877?

A—Well, in 1877 it had quit running in June.

Q—Where was the water running from, that stopped running in June?

A—Running from the river.

Q—Was the river discharging water into Buena Vista Slough during the year 1877?

A—It was.

Q—What is that?

A—Was

1813 Q—What is that?

A—Was the Kern River.

Q—Discharging water into Buena Vista Slough during the year 1877?

A—I don't think it was, unless it was some little spurts of water that came down.

Q—After the little spurts, as you style it, how long would that continue?

A—It might have continued for a day, and sometimes for two days or three; no length of time, no regular flow of water. It might have continued for a week.

Q—When did the water first commence to flow into
1814 Buena Vista Slough from Kern River in 1878?

A—It was in February.

Q—How long did it continue to flow during the year 1878?

A—It flowed about two months.

Q—Did it then cease?

A—Then I repaired my works there.

Q—What is that?

A—Repaired my works.

Q—What works?

A—Closed it up.

1815 Q—I asked you how long the waters continued to flow into Buena Vista Slough into the slough, during the year 1878? You say it commenced in January or February?

Mr. McAllister—About two months, he said.

The Witness—Read the question?.

(The reporter reads the question).

The Witness—That question—when I answered, two months was the question I supposed you had asked, in Buena Vista Lake. It continued to flow into the slough until July, 1878, and then it ceased.

1816 Q—When did it next begin to flow from Kern River into Buena Vista Slough?

A—When did it?

Mr. McAllister—During 1878 again?

Mr. Houghton. Q—Or 1879, whichever it was?

Q—You say it ceased to flow in July, 1878. When did it commence again to flow?

A—It began April 4th, I think, about the 1st of April, 1879.

Q—Are you not mistaken? Was the water flowing in Buena Vista Slough in April. What was the condition of the water in that slough at the time the suit was
1817 commenced on the 12th day of May, 1879?

A—There was a little. I can explain that about the water going there on or about the 1st to the 4th of April. That was one of those little spurts. The water just came down and ceased flowing.

Q—How long did it flow about the 1st or 4th of April?

A—Well, it flowed probably two or three days and then ceased, and commenced to flow again about the 10th of June, and continued until July, and then ceased.

Q—When did it commence to flow again from the river into Buena Vista Slough after July, 1879?

1818 A—I think it came in December, 1879. It then ran right along for some time. I can't tell exactly now. There were interruptions.

Mr. Houghton. Q—How long did it continue to run there, after December, 1879?

A—We then had water up to July again of 1880, and it then ceased. In 1881 it commenced probably in January or February.

Q—Was there no water flowing through the river into the slough after July, 1880?

A—I think not, unless it was just one of those little spurts of water breaking away and going down; it com-
1819 commenced to flow again in January or February 1881. That is on the first of February. I think it was in January, and it continued to run, I think, until about the 10th of February, 1881.

Mr. McAllister—The same year?

A—Yes, sir, 1881.

Mr. Houghton—It commenced the first of February, and ran until the tenth—ten days?

A—It commenced in January, I don't know whether it was in the early part of January—I think there was

1820 —it ran about a month or six weeks, might have been a little more or little less. That is to the best of my recollection.

Q—After it ceased running then, when did it commence again?

A—The 10th of March I met the water I started off to examine.

Q—(int.) You did what?

A—I started to drive right in the channel of Kern River, the main branch, and I met the water just below the mouth of the Joyce and Dixon Canal. It had just come down. At that time I was going right up the
1821 river. I had come right from headquarters.

Q—What had you been doing at headquarters at that time when you met the water?

A—I left there in the morning and went up to have some examination and some surveys made of that stream, from Buena Vista slough right up Kern River. Mr. McCray was with me.

Q—Are you sure that was the 10th of March?

A—When I met that water?

Q—Yes.

A—No, sir; it had quit flowing the 10th of March, and I met it, I think, the 2d day of April there.

1822 Q—Now, I would like to get at this—whether it stopped flowing or commenced flowing. You have testified both ways. You say it commenced in January or February, and flowed six weeks, and stopped on the 10th of March?

A—It commenced flowing.

Q—I wish you would start in and see if you can tell us in an intelligent way when the water commenced to run in 1881, when it ceased?

THE WITNESS—It was running there in January. To the best of my knowledge, it ran six weeks.

1823 Q—Then, when did it cease running?

A—It ceased running about the 10th of February.

Q—Then it commenced running again on the 4th of February; was that it; four days before it ceased; when did it cease running?

A—Well, the 10th of February; about that time.

Q—Now, when did it commence running again?

A—I met it on the 2d day of April. Now there might have been during that time. I was not there on the river. I was not right in that channel.

Q—During the time that the water ceased were you,

1824 at any time after the water ceased running, prior to April 2d, on the head of the Calloway Ditch?

A—Yes, sir; I was there on the 9th of March, and again on the 13th of March.

Q—What was the condition of that wing-dam when you were there on that first time, the 9th of March?

A—I don't think there was any wing-dam then. If there was, it was only a small portion.

Q—What was the condition of that wing-dam when you were there on the 13th day of March.

A—A wing-dam had been run out—well, the condition
1825 of it was that it was broken then.

Q—Well, what was the condition; describe it? How far was it running out from the north side of the river?

A—Well, I saw detached portions of a wing-dam until very nearly across the river at that time.

Q—Did you walk out on the wing-dam?

A—I walked out on the 19th on the wing-dam; on the 19th of March. I was not on the wing-dam on the 13th. On the 13th I just stood on the banks and looked at it.

Q—What was the condition of it on the 13th, when you looked at it; how near across the river did it extend?

A—It had been clear across the river from bank to
1826 bank, from the head-gate to the south bank of the river.

Q—How much of a break was that?

Mr. Haggin—On the 13th?

The Witness—On the 19th?

Mr. Houghton—No, the 13th, I am speaking of.

A—On the 13th they told me they had had it dammed clear across. I saw detached portions of it still remaining there. They told me they were going to repair it. On the 19th I went there and saw the dam had been built. They were hauling materials there. On the 19th I went there and it was built across the river. They had commenced on both banks and connected it in the
1827 stream. At that time it was broken, about a six-foot break. That was all the break there was from shore to shore. I saw Mr. Jewett there on the 13th, the party that was on the stand as a witness, P. S. Jewett, I believe his name is.

Q—What was the condition of the water in the river on the 13th of March, 1881, below the dam where it runs into Buena Vista Slough?

A—Well, there was no water there.

Q—You say you were again on the wing-dam on the 19th?

1828 A—Yes, sir.

Q—What was the condition of the wing-dam then?

A—Well, it was all in good condition except where this break was where the trees and sand-bags had been put in the river.

Q—What was the condition of the break at that time?

A—About 6 feet. The end of the dam was broke, and just a portion of that that was broke was still there, with the exception of a little brush that had washed off below; just made a break and swung around apparently like a gate, just a passage way between those two points.

Q—What was it that had swung around there?

1829 A—That was a tree.

Q—Was the balance of the river entirely dammed across with the exception of that break?

A—Yes, sir.

Q—Mr. Wible, where did that wing-dam that was built there, throw the water of Kern River?

A—Into the Calloway Canal. When I first went to Kern and Buena Vista Lakes in 1876 they were full.

Q—What was their condition in 1877?

A—The water flowed out through Buena Vista Slough. In 1878 the water did not flow out. In 1879 there was no water flowing out of the lakes.

1830 Q—What was the condition of the lakes before any water went into them this year?

A—They were dry. Buena Vista was dry; Kern had some water in it. I was Superintendent in the construction of the canal which has been referred to as the canal of the Kern Valley Water Co. In connection with its construction, I ran levels along the canal.

Q—What is the length of that canal from headquarters?

A—Twenty-four miles from where it leaves the slough.

Q—What is the difference in the elevation between
1831 the two points?

A—About 37 feet, headquarters being the higher elevation. That canal is constructed on a grade of about one foot to a mile. It has five drops. The first drop is a mile and a half from headquarters. That drop is a foot and a half. The next drop is four miles, and that is two and eight-tenths feet. The next is seven miles below the second, and that drop is three feet. The fourth is two miles farther down, and that drop is four and a half feet. The next drop is eight miles

1832 farther down with a drop of two feet, and there is no drop beyond that. It is about one mile and a half from the last drop to the end of the canal.

Q—After the water runs over the last drop, where does it flow?

A—It runs back into Buena Vista Slough and into the tules.

Q—What is the elevation of the point where the water leaves the end of the canal, 24 miles from Buena Vista Slough?

A—About 10 feet down to the water-line—the place that the water runs. I have run levels beyond that to
1833 the north; run a line clear through to Tulare Lake. The difference in elevation between the present end of the canal as constructed and Tulare Lake, is 35 feet and a half. In running these levels, I took the water-line of Tulare Lake.

Q—What is the difference in the elevation between Tulare Lake, where you took it on the line of the swamp land, and headquarters?

A—It is 72½ feet.

Q—What is the difference between the elevation of Buena Vista Lake and Tulare Lake?

A—I make it 82 feet and a half, Tulare Lake being
1834 the lower one.

Q—You produced a map here the other day upon call, when was that map made? (Exhibit D shown to the witness). I ask you when that map was made, Mr. Wible?

A—This map was made in 1879. I recognize it. That map was made by Mr. McCray in 1879. I was present when photographs were taken by Mr. Watkins of certain points on Kern River in February, 1881.

(The photograph is produced and the witness recognizes it as one of the photographs taken of it at that time, and it is marked Exhibit 29). That photograph was taken
1835 at the mouth of the channel, or just below the mouth of the channel where the New River enters into the Buena Vista Slough, the middle channel or fork.

The witness corrects his testimony by saying in 1881 the water ceased flowing on the 10th of March, instead of the 10th of February.

Another photograph is produced and marked 30, and witness says: that photograph was taken at Tracey's Crossing on Kern River or New River, and not at Tracey's Crossing on Buena Vista Slough. I was

1836 present when it was taken. Mr. McCray and Mr. Willow was there.

Another photograph is produced and shown to the witness and marked "31," and witness states: that the photograph was taken from the mouth of New River where it enters Buena Vista Slough, north of middle channel, and taken from the west bank of Buena Vista Slough, taken in February, 1881.

Another photograph is produced and marked "32," and witness states that that is taken from off the county bridge across Kern River and on Section 1, that bridge being at the mouth of the Pioneer Canal or where it
1837 takes water from the Kern River. Witness says: I mean the head of Pioneer Canal. This photograph was taken at the same time, in February, 1881.

Another photograph is produced and marked "33." Witness says that this photograph from a point near the bridge referred to previously. He was present when it was taken.

Another photograph is produced, shown to the witness, and marked "34," and he states that that is the mouth or head of the Pioneer Canal. He was present when it was taken, from near the east end of the same bridge that has been referred to.

1838 Another photograph is produced, and marked "35," which witness states was taken at the same time as the other photograph, February, 1881, and he was present. He says it was taken from a point at the head of the Calloway Canal and from west bank of Calloway Canal. The Calloway Canal is the canal of the defendant in this case. That was taken at a point where, as you stand on the head-gate and look down the Calloway, it was the right-hand bank.

Another photograph is produced, and marked "36." Witness states that he was present when it was taken; taken the same time, in February, and was taken from
1839 the west or south bank of the Calloway Canal.

Another one is produced, and marked "37," and witness says: that was taken from a point of hills, Buena Vista Hills, below the mouth of where Kern River empties into the slough; taken in February, 1881. It was taken from the west side of Buena Vista Slough. The last photograph was taken about three miles above Headquarter Camp, south, right where the river comes against Buena Vista hills.

1840 Cross-examination of

S. W. WIBLE.

WITNESS—In 1876 I was employed on the works at the slough—employed by Mr. Livermore. He was acting for the company—for the Kern Valley Water Company. At that time I think it was Swamp Land District No. 121. Afterwards I was employed by the Kern Valley Water Company, which, I believe, was an incorporated company. I was Superintendent of the works, of the canal. I was employed in 1876, by Mr. Livermore. He was acting for the Swamp Land Dis-
1841 trict, I understood. At that time I had charge of the building of the canal. I had nothing else to do for that district, nothing but to build that canal, or superintend its construction. I had nothing else to do for either the Swamp Land District or the corporation, except superintending that branch of the business and works. That general business. The whole thing.

Q—What was the whole thing? What did it consist of?

A—Well, the construction, and the general management of the whole thing

1842 Q—There was nothing else you had anything to with except that canal?

A—Well, I don't know whether you—I had charge of the business of having those lands segregated.

Q—I mean in regard to the work that you were attending to, superintending for this district or this corporation since 1876, was there anything else that you did except building this canal?

A—I understand the corporation didn't exist at that time—The Kern Valley Water Co. The way I know that, I drawed on—my bills were to the S. L. D. 121—The Kern Valley Water Co. That was a change of
1843 management. I think that change took place in June, 1877; I could not say positively. After that, my bills were drawn on the Kern Valley Water Co.

Q—During all that time from 1876 to the present time, for either one or the other of those companies or employers, didn't you do anything else except the attending to this canal?

A—It was all in one connection with that work, sir. I didn't consider there was any other work not in connection with that canal.

Q—Was there not a dam put at Cole's Crossing?

1844 A—There was a dam put in at Cole's Crossing in connection with it. I consider that the same work, in connection with it. That was all done at the same time and under the same administration. That was commenced in the Fall of 1876. No, it was not in the Fall of 1876. It was built in 1877.

Q—Why do you say you considered the dam the same as the canal?

A—That was the same swamp land district. That was within the swamp land district, that dam was.

Q—So was the canal?

A—I don't know. It is not in the swamp lands it is
1845 constructed; but it was for the purpose of the reclamation works.

Q—What reclamation works?

A—Well, that canal.

Q—How was the dam for that purpose?

A—That dam was to prevent the water from overflowing the lands, and also to let the water out in case they did overflow.

Q—Let it out of where, and into where?

A—These lands surrounding Buena Vista Lake.

Q—This dam was to let the water out of Buena Vista Lake?

1846 A—Yes, sir; or to let it in, either way. It was both to keep it from going in, and to let it out.

Q—You built the dam there to keep it out?

A—Yes, sir.

Q—You didn't build the dam there to let it in, did you?

A—Yes, sir; if they wanted it in there, to let it in.

Q—How did the dam assist in letting water into the lake?

A—I had constructed a head-gate there—a head-gate in the dam in the levee.

Q—But without any dam there at all, the water
1847 would have gone in, wouldn't it?

A—Yes, sir; probably more than we wanted.

Q—The dam in no way assisted the water to get into the lake?

A—No, sir; nor the head-gate either.

Q—Then you don't mean that you built that dam for the purpose of making the water go into Buena Vista Lake? You only built it to keep it out, didn't you?

A—Yes, sir; to keep it out, and if it got in, so as to let it out.

1848 Q—How would it get in there if you built a dam to keep it out?

A—Well, not at all. It didn't get in enough to run out.

Q—What?

A—It didn't get in enough. I didn't know but it would get in. If the reports and everything had been correct, or are correct, then there would probably be water go in there so as to have to let it out.

Q—Where would it get in there; which way?

A—Well, you take the country of Kern River. Take this country and from here it has a bearing south toward
1849 these lakes, and if it should break in any of those channels, or get into any of those channels, it would flow directly to those lakes.

Q—What would break over?

A—The river, Kern River.

Q—Then you expected that Kern River might get into the lake. Is that the idea, Buena Vista Lake?

A—Yes, sir. It might get in. I didn't suppose it would connect in or anything of that kind. But this was, as you see, constructed with a view to answer those purposes which might take place, with a view of using it for anything that might happen.

1850 Q—You thought one of those contingencies might be that Kern River would run directly into Buena Vista Lake?

A—It might possibly, or there might sufficient run so you would want to let a portion of the water out.

Q—How would Kern River get into Buena Vista Lake? How did you expect it would get in?

A—It might get through some of those channels.

Q—Which channels do you speak of?

A—It might break the dam.

Q—Which channel do you speak of?

A—Well, take the Old River channel.

1851 Q—Any other?

A—It might take the south fork, and there are other minor channels running off.

Q—Was it running in at the time you built this dam from Old River or South Fork into the lake?

A—There was more water went down South Fork.

Q—Into the Buena Vista Lake.

A—Yes, sir; that went into Kern Lake.

Q—Into Old River?

A—There was a time that the water went into Old River.

1852 Q—I am speaking about the time you commenced this dam.

A—I don't think there was at that time.

Q—There was no water then running down there?

A—No, sir; I think not.

Q—Are you sure of that?

A—In the Fall of 1876 there might have been a little water running down Old River.

Q—Why was it that you wanted to build this dam, so as to keep the water from going into Buena Vista Lake at Cole's Crossing there; why did you want to keep the water from going down into the lake there?

1853 A—Well, the swamp lands bordering on the lake.

Q—Was the object then, to reclaim the land, to keep the water off the land on Buena Vista Lake?

A—Yes, sir; around Buena Vista Lake.

Q—Was that the only object?

A—Yes, sir; to reclaim those lands.

Q—Was not the object to make the water go down into this canal that you were building instead of going into the lakes?

A—You could not allow it to go on to the lands and reclaim them at the same time.

Q—Was not that the object?

1854 A—Yes, sir.

Q—The object was to make the water go down and follow this canal, or get into this canal of yours down from your headquarters towards Tulare Lake.

A—Yes, sir; to prevent the water from running into Buena Vista Lake.

Q—To keep the waters which would otherwise go into Buena Vista Lake from going there, and allow them to go down through this canal?

A—Yes, sir; and also to keep the water from going on the land around Buena Vista Lake; and also to let the waters out if they did get in there, each of those

1855 three things.

Q—That was really what you were after?

A—Yes, sir.

Q—When were you first here?

A—I came to Kern County in 1874, in the fall. I think it was in October. I saw Kern River first when I crossed it in 1874, in October. I forded it right above the railroad bridge. There was a nice stream of water running there. It was about up to the axle of the wagon, and probably 200 or 250 feet wide, but a portion

1856 of it was shallow, probably it spread over wider than that. There was not so much water flowing there then as there is flowing there now. I crossed the river also in 1874 at Tracey's Crossing the same month, October, I mean the Tracey Crossing on New River and not on the slough. That crossing is on Section 24 in Township 30 south Range, 25 east, and just above where the river forks. I forded the river there. It was not so wide as up here, but it was a little deeper. I think it was about 100 feet wide, and it come over the axle. It was running along, a right brisk current, a swift current, an even current, not a ripple.

1857 Q—Where did you go after you crossed that?

A—I went out, followed out to the plains, or around through the timber, I could not just name the sections where I went. I was looking at the country at that time; I went on Section 10, Township 30, South Range, 25 east. I did not go down to the slough, but I was down on the lake; I was down here where Old River runs into the swamp lands. I did not see Buena Vista Slough at that time. I first saw Buena Vista Slough in 1876. I think there was water flowing in the upper portion of Old River. Where I crossed it I don't think there was any.

1858 Q—That was down near the lake?

A—No, sir; I didn't cross it near.

Q—It was down near the swamp land?

A—No, sir.

Q—But you went over on there?

A—I went over it.

Q—There was no water at all in it down there, was there?

A—That is I went—I didn't go to the Old River there.

Q—I thought you said you went to Old River where it crossed into the swamp land?

1859 A—I went to the swamp land, somewhere near there. I didn't see the river there, I saw it higher up.

Q—Was there no water running in it?

A—When I crossed it I think there was a canal right there that took the water out from the bed of the Old River. I don't know the name of the canal. I think it may have been Stockton's. I don't know that I have ever heard any name given to that canal. I didn't examine the canal, only just where there were some lakes or brush, or something put right into the river, enough to

1860 turn the water into this channel. Whether it run into the slough, or into the canal, I could not say. But right there I noticed that the water was taken off.

Q—Did you go down to the lake at that time?

A—Yes, sir; I crossed right there, and went to Canfield's, and from there down to Buena Vista Lake. It was not where Mr. Canfield lived, but where the town of Canfield is laid out. Canfield is on the east bank of Buena Vista Slough, between there and Old River, right on the bank of Buena Vista Slough. The Buena Vista Slough that I refer to is the one that puts out of New River; and it empties into Buena Vista Lake, run-
1861 ning by Canfield's. When that slough was full of water it would empty into Buena Vista Lake.

Q—Well, you went down to Buena Vista Lake this time in October, 1874, did you?

A—Yes, sir. I did not go to Kern Lake.

Q—How was the water in Buena Vista Lake at that time?

A—I did not go right to the lake; went to the margin of the swamp land. The water was all through the tules there. The water might have been higher or might have been lower than shown upon Map No. 4. The line referred to on map 4, is a dark line marked on
1862 the border of Buena Vista Lake, the end of the shading. I came back here again in November, 1874, and crossed the river at McGowan's Crossing; that is on section 10, township 30 south, range 26 east. That crossing was on Kern River—New River. I think there was more water there at that time than when I crossed at the other time. The deepest place it just came into the bottom of the wagon-bed. The water, where I crossed it, was over a hundred feet wide. The whole bed of the river was covered with water, except a small sand-bar. The water was running a pretty swift current. I crossed
1863 again at McGowan's Crossing. I think it was in December. The water was about the same that it was in November.

Afternoon Session.

After recess of the Court the cross-examination of the witness was continued:

Mr. Garber—Q—You said, Mr. Wible, that you saw this water in December, 1876. When was the next time you saw it?

1864 A—I would like to have the last question read there, that I answered.

The last two questions and answers read by the reporter.

The WITNESS—I wish to make a correction in regard to the photographs. I have examined a memoranda that I made of it at the time they were taken, and I find that instead of being in February it was in January, the 9th or 10th of January, 1881.

Q—When did you next see this water after the month of December, 1874? I mean Old River, New River, or the slough, or anywhere else?

1865 A—I don't think I saw the river below Tracey's Crossing in 1876 any more after December. I crossed it frequently in coming to Bakersfield at different places. The ford that I most frequently came through was about the railroad bridge. I crossed there in December, 1874, and I crossed there in 1876. After December, 1874, I crossed just as occasion called me to come to Bakersfield. I always had to cross the river. I was living on Section 32, in Township 29, south Range 26 east. I moved there in January, 1875; was farming. I did not see Buena Vista Slough during January, 1875; did not go directly on Buena Vista Slough again until October,

1866 1876. Nor did I see Kern Lake. I don't think I saw them except at a distance until 1876. I think it was in the Fall. After January, 1875, I kept crossing New River at all times, from then right along up to the present time. I crossed New River in January, 1875, about the railroad bridge. There was considerable water there.

Q—How much?

A—One time I went up there and there was so much water that—I don't know as that was in January.

Q—I am speaking of January, 1875, now.

A—Well, I can't—I crossed it though, in 1875, Janu-

1867 ary.

Q—Well, how was the water then?

A—Well, there was water, considerable, it was not past fording. It must have been 200 or 250 feet wide; just above, it was about belly deep to a horse in the deepest. I can't say how often I saw it in 1875. I went there as business required me; may have seen it probably a half a dozen times in January. If anything, the water at that time of the year was increasing. I think it was slowly rising in the river, towards the last of January.

Q—Did you see the water of Kern River in January, 1875, at any other point than the railroad bridge?

1868 A—I followed right up along it, from near where the county bridge is, to the river. I saw it whenever I came to it. The county bridge is on Section 1. It is the Pioneer Bridge at the head of the Pioneer Canal. The road there in January, 1875, didn't go right to the bridge. It came out on the north side of the Pioneer.

Q—Now in February, 1875, did you see that river?

A—Yes, sir.

Q—Where?

A—The same crossing going to Bakersfield, the same crossing above the railroad bridge.

Q—Anywhere else?

1869 A—I came up—it was in February, I think—and the water was so high then, that I could not—I didn't like to undertake it on horseback; and I tied my horse to a tree there, and came across on the railroad bridge on foot.

Q—The water was very high then, and all during February, 1875?

A—No, I think it went down again in a few days, so we could ford it, I could not say what time it went down. I think some time in February. It must have been towards the latter part of February, I don't know just how long the water lasted. During the balance of
1870 the month there was probably twice the amount of water in the river as when I first saw it in October, 1874. I also saw the river in March, 1875, along this same point. The water had got up so that they started the ferry somewhere below the railroad bridge. The water went down in the latter part of February, and came up again in March, 1875. I think the water was high three months, March, April, May and June. It was not over the banks. It was so we crossed on the ferry instead of fording. There was a big stream running during those months, past fording, and it was from bank to bank. Where the ferry was it was in the
1871 neighborhood of 200 feet wide. I think it was over six feet deep. In July, 1875, the 4th day, I undertook to come from my place to Bakersfield, undertook to ford the river just a little above the head-gate of Buena Vista Canal, about on Section 33, Township 29, South Range, 27 east, and got into quicksand, and the deep water was just ahead of me, so I backed out and got my team out, and came up to the ferry and crossed there. There was a great deal of water there but not as much as in June. The river had fell, and I supposed I could ford.

1872 In the fall, there had been a ford there and I had crossed.

Q—Well, how was the water there?

A—Well, that was a pretty wide place there. The deep water was not wide, but a sand bar along from the middle of the river out, I think may be it is 700 feet wide there.

Q—And how deep?

A—That is, there was not water that wide. I think the water, where I drove into it from one edge to the other, was 200 feet, 250 likely. I didn't go into the deepest part of it. I don't know how deep it was. It
1873 was so deep, I backed out. It might have been over six feet deep, might have been four feet.

Q—How long did that high water continue after July, 1875?

A—Well, that was in July, there was water all the season. I think we commenced fording at that point the last of August or the first of September—might have forded there before that.

Q—How was the water there in the months of September and October, 1875?

A—I could not tell you right at that place. I don't think I tried that.

1874 Q—Well, at any place on the river?

A—Forded there on Section 23—no, Section 31.

Q—How was the water there in September and October, 1875.

A—Well, the water was wide there. The stream is very wide there; must be 700 or 800 feet wide. The water was not all over that.

Q—Well, how wide was the water there in September and October?

A—In October?

Q—September and October; either or both?

A—Well, I think it was along about the 1st of Sep-
1875 tember, in that month, that I met a man right there on the banks of the river, and he stopped and waded across. I could not see him exactly until he came up on the other bank, for he went across a little island that was right close.

Q—Well, do you know how deep the water was there then?

A—Yes, sir; as far as I could see him, it was over—he started in—a good portion was at least six inches deep. I judge by his wading.

1876 Q—Was that about the average depth of it?

A—I think it would average more; because some places he got in, I think it took him up to about the middle of his thigh. That would be about it. The water was probably three or four hundred feet wide, running a good current. In October, 1875, the water kept flowing. That month I think we staked out a ford across there. Probably the water at that time at the deepest place was two feet, somewhere in the neighborhood of 200 or 250 feet wide.

Mr. McAllister—This is all relative to New River, I understand?

1877 A—Yes, sir. In November, 1875, the water was about the same; if any change, a little lower; and in December about the same as November.

Q—Now, then, in 1876, how was the water there?

A—The water I think—I don't know whether it raised in January—January, 1876. Is that the date you are referring to?

Q—Yes, sir.

A—Well, I would not say that the water raised much in January, but the water, I think it was on the increase. It was about 200 or 300 feet wide, and probably two feet or two and a half feet deep, the deepest, and running
1878 probably two miles an hour. I think we had high water in February. I think that is about the time I finished work on the Pioneer Canal, and I undertook to cross the river. The horse got down, and I had to return. In March I should judge there was four feet of water. Lots of water there then, but not quite as high as in February. In April, 1876, I think the water was high. In May, 1876, I think the water was high. The water was high in June, 1876. In July, 1876, the water was falling, I think; I cannot tell how much. There was no gauge there. There was quite a stream of water running there, three or four hundred feet wide.
1879

Saturday, November 11th, 1881.

At that particular point, it was probably three or four hundred feet wide. That was at the crossing on section 31. I did not go across to see how deep it was. I should judge in the deepest place it was three or four feet. In August, 1876, the water had gone down. It was falling. Probably 200 or 300 feet wide, 2 or 3 feet deep. In September, 1876, probably 200 feet wide.

1880 It was that month that I set stakes across where New River Bridge is now built—that is, the Pioneer Bridge. It was two feet, or a little over, deep. In October, I could not say how it was, because I went away. It might have been that I measured it about the first of October, 1876. It was then about the same as in September. Between two and three feet deep. Two feet and three feet was the deepest. Then it was shallow on each side. I think the water was about 300 feet wide.

Q—You didn't see Kern River at all in November, 1876?

1881 A—Yes. I saw it at night and day when I passed it. I went to work for the Swamp Land District No. 121 in October, 1876. In November, 1876, the water in Kern River was probably lower than it was at the time I measured it. I think it was. I am satisfied it was. The only circumstance that I can call particularly to recollection, in taking any notice of the river, was a wing-dam to throw the water so as to build that Pioneer Bridge.

Q—Well, about how much water was there running then in November?

A—There might have been not more than half the
1882 quantity I described in October. In December it was about the same as in November, a little more or less. I think about half the water there was in October. In January, 1877, about the same as in December, a little more.

Q—Same as December?

A—Probably the water had increased a little. It was probably 200 feet wide, and in the deepest part two feet deep. Probably average a foot deep. In February, 1877, I think the water was running less. I think the water was gradually falling.

1883 Q—About how much water was there then?

A—Well, sir, it was just a natural impossibility for a man to tell that.

Q—You don't recollect then? Were you there at that time, in February, 1877?

A—I passed that river right along, probably every week, but could not tell you exactly when the amount of water, getting down those measurements and all those things. It is just a natural impossibility for a man to tell it. I think I passed there every week in February, but I cannot give you any idea of how

1884 much water was running there. There was water running there, but I cannot tell about the measurement. I think during that month the water may have raised. I think probably there was more water. I think it was about that time that I commenced crossing on the bridge, and for that reason I would not notice the water so particularly. I think there was more water running in February than in January.

Q—Well, about how much was running, and how wide, and how deep, if you can tell me; if you cannot, say so?

A—Well, I can give no definite answer.

1885 Q—Can you give me any idea or approximation as to the amount of water there; the width and depth of it in February, 1877? if you can do so. If you cannot, say you cannot. That is all. Let us get along, we have a long way to travel?

A—I will take my time to study on that.

Q—Certainly.

A—Well, I don't want to give you any estimate of the quantity, but I think there was more than there had been running there in January.

Q—How was it in March, 1877?

A—There was water in March, but that was the dry
1886 season, and the water kept falling. When it failed entirely, I cannot tell you. I think there was some water running there until about the first of May. I cannot tell how much in March, but it was running down past the New River bridge. That is on Section 6, at the Pioneer Bridge. All I know about the water that month is, that as I passed on the bridge, the water was running down the river. I think the water ran down towards the slough in the river. There was sufficient water to run to Bueua Vista Slough.

Q—You don't know, in fact, that it did run down towards the slough or not through the river during
1887 that time?

A—I would say—

Q—Well, if you know of your own knowledge, all right. If you don't—

A—Yes, sir; the date is what bothers me.

Q—Well, March, 1877?

A—Well, that is what bothers me. Whether it was exactly in that month—

Q—Well, what is the last time in that year that you know it did run clear down to the slough in the river?

1888 A—Well, I think it was in March, a little water.

Q—How was it in April, May and June, 1879?

A—In June there was no water.

Q—When did it quit?

A—Well, between that period I cannot give you the exact dates. In 1877 it probably quit running in the river in April or May. I think it commenced running again in January, 1878. Between April or May, 1877, and January, 1878, there was no water running in the river at that point.

Q—What was the last point it did run in the river at that period?

1889 A—I could not tell exactly. In April or May, I think, there was some water running at New River bridge.

Q—Well, after April or May, 1877, until the first of January, 1878, how low did the water come down in the river?

A—I could not tell just what month it failed; it failed about April or May. I don't know how far it ran down the river from that time until it commenced to gain again. I think there was some water all the time coming as far as New River bridge.

Q—What became of it?

1890 A—Oh, those ditches took it out, those canals took it out.

Q—Which canals?

A—The last one that took it out, I think was the Pioneer. I think that they took all the water there. I don't know whether during that period it ran above railroad bridge. I was not up there.

Q—Now, in January, 1878, how much water was running in the river?

A—Well, I cannot say just how much there was. It rained all Christmas day. I was on my way from Bakersfield to my camp on Christmas, and it rained very hard—Christmas, 1877. And then it was several days,

1891 I think, before the water came down the river. I saw water at the Pioneer bridge in January.

Q—Where else?

A—Well, I came from there right up to Bakersfield. I would travel along the edge of it on 33.

Q—Saw it at various points coming to Bakersfield?

A—I saw it on the bridge at 33. I may have seen it somewhere else on that section, but I cannot call it to memory. In January, 1878. There was quite a stream of water running down there. Could not tell how much. The bed of the stream had been changed, and there was

1892 a weir put in, and I could not say how much water run over that, but there was quite a stream of water. It may have been two hundred feet wide and average a foot deep, and that ran right along, and in February, 1878, we had a flood—what we call a flood—and it got banks full. I think there was plenty of water in March, 1878, my attention was called to other business, so that I can't answer. There was plenty of water. In April there was plenty of water.

Q—What do you mean by plenty, bank full?

A—Yes, sir; from bank to bank. In May, 1878, lots of water—bank to bank. In June, 1878, also, lots of
1893 water.

Q—From bank to bank again?

A—Yes, sir. Well, along the latter part of June it began to fall off.

Q—How was it in July, 1878?

A—In July, 1878, the water failed at Headquarters Camp.

Q—No, I mean up in the river, if you were there?

A—Well, I don't know just how much water there was running there. There was enough water running by to come down to Headquarters. I was on the river in July.

1894 Q—Well, how was the water?

A—I say there was water enough running there to get down to Headquarters.

Q—Do you recollect how much water was running in the river, without regard to Headquarters Camp?

A—There was probably passing that point a stream about—below the Pioneer Bridge, it is a sand bar there, and right next to the west bank I don't know how deep the water was. It was probably 100 or 200 feet wide at that point. It was scattered over the sand bar. That was in July, 1878. You could see the bottom. Probably it might have, right next to
1895 the bank, where it was a foot or 18 inches deep. This was right below the bridge. In August, 1878, there was no water below the Pioneer Bridge.

Q—Had the water got down to that point?

A—Yes, sir; but no water below the bridge and none at Headquarter Camp.

Mr. Garber—I do not care about Headquarter Camp. I am just asking you about the river now. Well, now, in September, 1878, how was it in the river?

A—Well, there was no water below there, probably a little water, just seepage water, just running along.

1896 Mr. GARBER—In October, 1878?

A—Small.

Q—November?

A—Small.

Q—How much?

A—Well, I don't think the water would run more than a mile below the bridge.

Q—December, 1878?

A—Well, all I could say, there was water at the bridge.

Q—How much?

A—It was all taken out there.

1897 Q—Well, how much was there?

A—There was no water below the bridge to amount to anything. In January, 1879, if my memory serves, me, I think there was a little water that ran by the bridge. I cannot state the amount.

Q—February, 1879?

A—It appears to me that there was no water, or there was not sufficient water ran by there to come into the works at all.

Q—I don't speak of the works.

A—Well, I want to. It is pretty hard for me to remember, just taking from month to month.

1898 Q—Well, in February, 1879, how much water was there in the river?

A—Well, there was some water. I could not tell how much. March, 1879, there was some water. Could not tell how much. I know there was some water there.

Q—Could you tell about how much?

A—Well, there was enough to go to Headquarters.

Q—In April, 1879?

A—I think the water came into Headquarters.

Q—Never mind about Headquarters; tell me about the river?

1899 A—There was water enough come down to go to the works.

Q—Were you on the river, itself, in April, 1879?

A—I think I was, and crossed on the bridge; and I think there was considerable water coming down in April.

Q—April, 1879, was it from bank to bank?

A—No, sir, the water was light; it was not a large stream of water. There was water; I could not say just how much, probably it was—well, there was water enough passed there to come into Headquarters camp, right to the head of the canal.

1900 Q—I don't care about the Headquarters. If you can say how much there was in the river, tell me; if you cannot, say you cannot do it; that is all.

A—Well, I cannot give you any definite figures.

Q—How was it in May, 1879? Did you cross the river there?

A—I crossed the river in May, 1879, and there was some water in it running down; there was more water above the bridge than there was below it; just a small stream below the bridge. If I recollect right, it may have been 50 feet wide, or perhaps 100; not very deep; I could not say how deep.

1901 Q—Could you say about how deep it was?—from your knowledge of the river, could you say how deep it was?

A—I would say there was water running there, and I could not tell the amount. I crossed the river in June, 1879; I think there was some water in June, at the bridge; just below there you could see that it spread out, and I think may be there was some water allowed to run over a little, and then seepeage water that would run through this weir. It might have been 10 feet; it might have been 200 feet wide, and from 3 to 4, or 5 or 6 inches deep. I crossed the river in
1902 July, 1879; I think the dam was made perfectly tight then; it had all the water out; I don't think any water was running below the bridge then. I crossed the river there at the bridge in August, 1879; I think there was very little water down as far as the bridge. I crossed also in September, 1879, and I think there was no water there, only just what went into the Pioneer ditch. In October I also crossed the river, and the water was about the same as in September.

Q—November, 1879?

A—About the same.

1903 Q—December, 1879?

A—I think it was about the same.

Q—January, 1880?

A—There was water coming down, but I don't think there was any water went down. There might have been a little water below the bridge, I could not say positively.

Q—February, 1880?

A—Well, I think there was in 1880, considerable. I crossed the river in February, I think. I crossed it every month in the year. I crossed it at the same point.

1904 Q—How was the appearance of the river, at that time there?

A—I think there was lots of water there. In the latter part of February, I think it was clear across the river.

Q—How wide would that be?

A—Well, it is 460 feet there at the bridge. I did not see it right at the highest time. I saw it after the water had fallen. About February, we had high water. It was high enough to flow to the top of the banks, probably three feet.

Q—When was it highest in February, 1880.

1905 A—I cannot tell exactly.

Q—About when?

A—It came down and I had some breaks in the canal. I could not give the time of the month when it was highest.

Q—You say it was about 3 feet deep at the banks. How deep would it be in the middle?

A—Well, it was probably pretty deep in the middle. I judge it would be in the deepest place 5 or 6 feet.

Q—March, 1880, how was it?

A—Had plenty of water. I crossed the river, I think it was flowing from bank to bank. April, 1880,

1906 plenty of water. I don't think it was flowing from bank to bank. In April I think the water down there began to get so it ran in—did not spread from bank to bank. It might have been 2 or 3 hundred feet wide. In May, I think, all the water was taken out. There was some water came down in June.

Q—How much water was running at the place that you crossed?

A—I don't think there was any water. There might have been a little running down. There was no water coming down to where I was.

1907 Q—I am asking you about the place where you crossed?

A—I know you are, but I am just explaining. There was some water came through to the canal.

Q—Please leave the canal alone for the present and answer.

A—I can only give you an idea. I would pass there and I would see water running or I would see that there was just a little water running in the stream. I don't think there was any water running there until about the middle of June, that I can call to my memory, and that is from circumstances connected with it.

1908 There was some water running there about the middle of June, where I crossed. It might have been running 100 feet wide, or more.

Q—How deep?

A—It may have been 6 inches, or it may have been a foot, or a foot and a half deep in the deepest place. I don't think there was any water where I crossed in July, 1880.

Q—August, 1880?

A—No water.

Q—September?

A—I don't think there was any water. If there was
1909 it was only a little seepage water running down.

Q—October?

A—I don't think there was any water went down.

Q—November?

A—I don't think there was any water to amount to anything.

Q—December?

A—I think there was water. There was some water where I crossed. I can't tell how much. I crossed there in January, 1881. There was considerable water running in January. I crossed at Tracy's crossing, and I crossed at the bridge and saw it running. I refer
1910 to Tracy's Crossing on New River. I think the water was 100 feet wide and two feet, may be a little more deep—2½ feet. It was running along a good, smooth current. it might have been two miles an hour. I crossed in February, 1881. I can't say whether I crossed at Tracy's Crossing. I drove up there.

Q—At how many places were you on the river in February, 1881?

A—I crossed it at the bridge, and went down the river.

Q—Well, how many different places did you see it
1911 from the bridge down, in February, 1881?

A—There was quite a number of places that you would see the river right along the road. There was considerable water there still.

Q—About how much?

A—Well, I don't know, as I crossed in the water so as I could get any idea of that; I think I drove up to Tracy's crossing there and looked, and it might have been it was 100 feet wide.

Q—And two feet deep?

A—Well, it might have been that deep there. I was there in March, 1881. I crossed it, but I didn't cross

1912 it at Tracy's crossing. I saw the river. I crossed it on the bridge.

Q—Anywhere else in that month?

A—Yes, sir; I think it was in the middle part of March. I drove up and crossed Buena Vista Slough, and went up the centre channel of New River. I think I crossed it; I would not say positively; but it don't make any difference. There was no water there.

Q—Was there any water there in March, 1881, in the river?

A—Yes, sir; in the fore part of March, from the 1st to the 10th. It was running below the New River
1913 bridge, and it was probably about the 25th of March, somewheres along there, that I drove into the bed or drove to the bed. I don't know exactly whether I crossed it or not. There was no water in it.

Q—Was there any water there from the 10th to the 25th of March?

A—I don't think there was.

Q—Do you know whether there was or not?

A—That is, there was at the New River bridge from the 10th to the 25th, along there.

Q—Well, I am speaking of that particular part of the month, from the 10th to the 25th; how was the
1914 water in the river during that period?

A—Well, I can't tell you exactly; I think I could refresh my memory by a transaction that transpired just at that time. I remember going there, and could find the date of that and could tell you exactly.

Q—But now you cannot, without you refresh your memory, tell me?

A—I could not tell you; it was in the month—

Q—Whether it was the 10th or 25th of March, you could not tell without refreshing your memory?

A—No, sir.

1915 Q—You were there about the 25th of March?

A—I think it was along about that time. I drove up that central branch there, and there was no water there then.

Q—How long after that was it before there was water there?

A—I drove up again that central branch and went up the river a little higher up than I had been before and I met the water. That was on the 2d day of April, 1881. I met it just below the Joyce & Dixon Canal. I was first on Buena Vista Lake in the fall of 1876. I was between the lakes in 1874. I was next there in

1916 the fall of 1876, sometime in October or November. The lakes were full so that the water ran out to the north. The lake was full at that time. It was full enough so it would run out. I think it was running out then to the north.

Q—Do you know whether it was or not?

A—I think it was just on a—just a kind of a standstill. I don't know as it was running, very slowly if it was at all—running north.

Q—Was it moving at all?

A—It appeared to me—I could not say just positively about the date; but I recollect it was in the fall
1917 that I went there, and I wanted to see just how the water was running. It appears to me I throwed in a float or something, or a stick, to see whether it would move. I wanted an object in the water so as to be positive it was running. And I remember doing that in 1876. It was in October or November.

Q—Well, what was the result?

A—Well, it was running north; I think just moving.

Q—Are you positive of that?

A—Yes, sir. When I throwed those sticks in that they moved; just moved.

Q—Which way was it moving?

1918 A—Well, I don't know; I tested it. It looked as if it was standing still; and I did this to test it.

Q—By the eye it looked like it was standing still?

A—Yes, sir.

Q—When were you next at Buena Vista Lake?

A—Well, this was just at the outlet; I was not up to the lake.

Q—What do you call the outlet?

A—Buena Vista Slough.

Q—What part of the slough were you on when you threw those chips in?

1919 A—Just where the bridge is.

Q—What was your object in making that test?

A—I then contemplated building that levee. I was going to build a headgate there, and wanted just as little water as possible.

Q—What did that test have to do with that?

A—That would show me just which way the water was, and what amount of water there was there.

Q—Throwing a chip in would tell you how much water there was there, would it?

A—It would show me whether the water was receding. I expected it would recede so that I would

1920 have less water to contend with. I wanted to know when to commence my work.

Q—You say you put a headgate in there?

A—Yes, sir.

Q—Describe that headgate.

A—Well—I put in a headgate there. I built an earthwork there up to near the edge of the water. And then I waited till the water run down as low as it would run.

Q—Run down which way?

A—Run down Buena Vista Slough.

Q—On the north side of the bank?

1921 A—Yes, sir. On the south, too.

Q—Run down on both sides after you built it?

A—Yes, sir; it had to empty out. The water all ran on until it was past discharging; ran out through Buena Vista Slough, running out of the Lake into the slough. That was before I put my dam there; it would run out before I put the dam there—before I put a headgate there. When I put the dam there, I commenced at the outside and built as long as there was no water to contend with. The water was running out of the slough then, very slow. It run faster than at this time I made the test. I put the dam 1922 in in 1877. That is, I put the headgate in in 1877. I commenced on the dam and the levee in 1876, in the fall. I think it was in November.

Q—In November, then, you built a dam of earth each way until you came to where the water was flowing?

A—Yes, sir.

Q—Well, then, what did you do?

A—Then I just let it run. I didn't go on and build the dam then. I waited until the water was all discharged; until the flow had quit; until the water had 1923 quit running out of the lake. It was running out a little in June yet. I put in the headgate in November, 1877. I finished the earthwork in January and February, 1877, and at that time the water was still running out. I completed it by putting in the headgate. That was in the fall of 1877.

Q—Now, describe how you put that headgate in—what it consisted of, etc.

A—After the water had quit flowing, I got my timbers so that I could get in. But the water was there still; water right there standing still. Then I drove piles and made a coffer dam; and after I got my coffer

1924 dam completed, then I put pumps in and pumped out the inside of the dam, so that I could construct my foundation and works inside of this coffer dam, and the water was kept out. I made this headgate clear across from bank to bank. It was built of lumber, and the excavation was 6 or 7 feet below the water.

Q—Well tell me how it was built.

A—Well, after I got my coffer dam pumped out, I excavated it. I think it was about 6 or 7 feet below the water. I laid my sills in facing that, and drove my pilings to keep them there; laid my floor and drove my timbers for the bulkhead on each side. Drove
1925 wings, so as to prevent the water from cutting the dirt away from the bulkhead. After I had got all of the works completed inside, then I built a dam on the outside of the sheet piling.

Q—Which side?

A—Both sides, north and south; just so that it would top the water. I took out my excavations and used a part of it to build that across. Then I cut my sheet pilings off level with the floor, about 6 or 7 feet below the surface of the water. When the gate was finished, it was in such a condition that I could either stop the water from going through or let it go through. I had gates
1926 in so I could control the water; let it in or let it out. Those gates were fixed with boards, so that I could put them in or take them out any time. That was at the time I spoke of, that I put this headgate in, and at the time I put the earthworks across both sides. When I would take out those boards, the water would wash that dirt away. The first time when that work was so completed as to prevent the water from flowing through from either way, was in November, 1877. I then shut the gate.

Q—How long did it continue in that condition so as
1927 to prevent the water running through?

A—Water could flow through when it rose sufficiently high to run over the top boards. It did run over. I forget just how long, till the high water in February, 1878, knocked out the gates on one side. From November, 1877, to February of 1878, it kept the water from going through there at all. There was no water there to go through. It could not have gone through if there had been any.

Q—And the first water that came broke it down?

A—Yes, sir. Well, no, sir; not the first water.

Q—Then there was water that could have gone through if it had not been for that gate?

1928 A—Yes, sir; water came down there in January, 1878.

Q—Well, why did you tell me there was not any water to go through if there had not been?

A—Well, when I first completed there was none. There was water there in January, but there was no water in December.

Q—How high did the water have to get before it could get over?

A—Well, I had the gate up. I think the water run over, and then I put in more boards in the gates, and raised the water higher. That was in January, 1878, I
1929 put the boards in. I put enough boards in there so that it did not run over until the flood came there. I should think the water would have to get 7 feet high before it would run over after I put the last boards in; or probably not more than six feet above the water line, after I constructed the gate. I think about 12 feet of water stood on top of my ground floor.

Q—When the flood of 1878 came and broke that dam, which way did the water come, the flood to break it down?

A—It came down Kern River.

Q—It went south?

1930 A—Part of it went south after it broke and flowed through south into the lake.

Q—In 1877, how full was that lake?

A—In 1877 it ran out. It was full enough to run out along to the 1st of June.

Q—In June, 1877, it was so full it was running out south into the slough?

A—Yes, sir. I think it failed entirely in June. From that time on I don't know how deep it was in the lake. It had fell. It flowed so that it would not run out of the lake.

Q—And did not get any lower?

1931 A—Yes, sir, it got lower. There was no water in it. The lake kept falling.

Q—What made it fall?

A—Well, I suppose it was percolation or evaporation; both, I guess. From June, 1877, until February, 1878, it probably may have fallen a foot. It did not flow out in 1878 into the slough. Because, after the break, I closed it up so that it could not, and during the year 1878, none of the water could get out of the lake into the slough. Since February, 1878, no water has got out of the lake into the slough.

1932 Q—And there has been none since?

A—No, sir.

Q—And the reason was what?

A—Well, there was none to come out—didn't let any come.

Q—You have never allowed any to go in since then?

A—No, sir. Well, yes, I let it go in since that. There was some water went in in 1878, but not enough to fill the lakes. The lakes never got so full in 1878 that the water ran out again.

Q—How was it in 1879?

A—No water flowed.

1933 Q—What was the reason?

A—No water in there to flow out. The water in the lake, I suppose, had evaporated. The lake had got low in 1879. I cannot say just how low, but I know that it got so low then that right at the head of Buena Vista Slough the sediment that had washed in there, between that and the lake, had cut off connection. The water had then got inside the tules so low that we could see the mud flats inside the tules. No water flowed in there in 1879. There was no water coming down the river hardly at all.

1934 Q—There was no water coming down the river in 1879?

A—There was little at times. It did not go into the lake. We had it closed up then and turned the water north, whatever came. Had a dam across, so the water could not go in. There was some water went into the lake by a break in 1880, in the Buena Vista levee. The break was not where the headgate was–it was just above. It may may have been three-fourths of a mile from the gate east. The water ran in there in 1880, but not enough to fill the lakes. I repaired that break. I talked with Mr. Crocker about the work up there at Cole's crossing at
1935 the time I was building it, before I put in that headgate, or before I went there. I didn't talk to Miller & Lux about it. I don't think Mr. Crocker bought any of the supplies for me for that work. I don't know of his buying any supplies for the construction of that dam. I don't know of his paying out anything on the construction of it or on account of it. I don't know anything about that. For all the work and labor that was done and supplies, I gave orders on the Secretary.

Q—You did not know that Mr. Crocker had anything to do with that?

A—No, sir. I commenced work on that canal at my

1936 headquarters on the 11th or 13th of October, 1876, just as soon as I got there.

Q—Did Mr. Crocker have anything to do with that?

A—Well, I don't know in what capacity, Mr. Crocker being very familiar with the country. He didn't draw no bills, or settle any accounts. We talked together about it—about matters and things pertaining to it.

Q—Did you consult with him about doing that work, how it was to be done, whether it should be done, and so forth?

A—No, sir. I was put there to do that work, and I
1937 was hired by Mr. Livermore, and made all the arrangements with him. Crocker and I talked more about the floods and the country—got all such information as that.

Q—Did he agree with you that it was a good thing to do?

A—Yes, sir; he thought that canal was a benefit to his land.

Q—He was in favor of it?

A—Yes, sir.

Q—Now, where did you put in a headgate in that work that you spoke of the other day—describe it to
1938 me?

A—Where did I put in a headgate—on Buena Vista slough at the headquarter camp.

Q—Now, where is that headgate you spoke of as being close by the headquarters or top of the canal, the other day?

A—Well, right there is where it leaves the slough.

Q—Well, how far is that headgate in the canal, from the place where the canal crosses the slough?

A—Well, it leaves it right there.

Q—Where is the headgate on that map?

Mr. McAllister—At the place where the canal
1939 leaves the slough, as I understand it.

A—There is where it divides. This Map B is correct.

Mr. Garber—Q—Well, then, show me on this map where that headgate is? Just mark where that headgate is with a pencil?

Mr. Garber—Well, now, I will mark it with a cross. Is it right there where this blue line crosses the section line?

A—Yes.

1940 Q—Exactly?

A—Well, it is right where that line just passes the headgate. The headgate is this side of it. I don't know exactly how far. It is close to it. It might have been 50 feet. It is right close to the section line between 15 and 14, 50 feet west of it.

Q—How far is that head-gate from where the canal crosses the slough?

A—Built right in the edge of the canal and right in the edge of the slough. It is on the west branch; the the slough forks there. There is another fork of the slough, which is further east. It is where the canal
1941 leaves the west slough.

Mr. Garber—Now, Mr. Wible, I want to go along through this slough a little with you, and I hate to undertakethe trip. When was it you said you had passed up and down the slough last—this channel?

A—I passed up there last Saturday, the 24th of April.

Q—Where did you go; where did you first strike it then?

A—I first came into the slough at Bonestell's place—Bonestell's house—in a buggy.

Q—How did you find the channel then at Bonestell's
1942 house?

A—Well, it was just—I don't think it ran into the bottom of the buggy—came up to it.

Q—I spoke of the channel, not of the water. What sort of a channel was there, then?

A—Well, I found that much water in it. A little of it came into the bottom of the bugy. That was right at Bonestell's house—on the east side of it.

Q—Was the water running pretty fast there?

A—Yes, sir. I could not tell how fast, probably a mile and a half or two miles an hour—probably three and a half feet of water in the channel. I followed the
1943 channel from there right up to Headquarters. I think it is nine miles, in a direct line, or ten miles. I think I followed it about twelve miles; that is, it is twelve miles, in the course of the channel, from Bonestell's house to Headquarters, and on last Saturday I followed it up that distance. I found water all the way.

Q—How much water was running in that channel all that distance?

A—Well, it was 3½ feet where I crossed it, and that

1944 was the shallowest place that I know of, and I know there were deeper places, because I had one ford above there that when the water is lower that I can cross, and I would not undertake it.

Q—Well, where was that water coming from?

A—It was coming from the gate—the head-gate that I speak of.

Q—Was it overflowing at any point during the distance of twelve miles?

A—There was one place where the water was just—where there was a high water channel where the water had just run out. It was not overflowing the banks of
1945 the channel at any point in that distance.

Q—There was none of that water running over the banks at any point from Bonestell's house up to headquarters?

A—No, sir. I drove right along. The water was just entering and had got a little ways out into the west channel at the head of Weed Island, and I followed.

Q—Well, had it overflowed the banks of this channel at any point?

A—No, sir.

Q—Was it full? Was the channel full at any
1946 point?

A—The channel would hold a good deal more water.

Q—It was at no single point in that whole distance as full as it would hold without overflowing?

A—That is in getting here, it began to go into those other channels that would lead off around and back into that.

Q—I understand you to say there was one continuous channel the whole distance?

A—Yes, sir, one continuous channel.

Q—Well, there were branch channels to it?

A—I could see little low places that would go out.

1947 Q—What do you call these low places?

A—Well, you might call them a depression or a slough. They are parts that break out at high water. Channels that break out. They would run into those places before they would overflow the banks.

Q—I understand you to say that during this distance of 12 miles, or for this distance of 12 miles, there was one continuous connected channel?

A—Yes, sir.

Q—And the water running in it and not as much as it could hold without overflowing it?

1948 A—Yes, sir. There was only one place that I crossed and there was a little this side—1½ miles this side of Bonestell's house, where there was one of these channels, and the water had got into that. I drove right out from that. That was connected with the main channel. The water came out of the main channel into that. It intersected the main channel—it was a branch or fork of it. The way to explain that would be the main channel, then there is lower ground west of it; and once in a while in those little depressions, when the water got high, it would run there and run towards—

1949 Q—Come here to this map and see if I can understand it?

Witness goes to the map.

Q—Where is this twelve miles on this map?

A—Section 24, Township 29, South Range, 23 East.

Q—Is that Bonestell's house?

A—Yes, sir.

Q—Now, that is twelve miles?

A—Yes, sir.

Q—Up to there?

A—Yes, sir. That is the 12 miles I traveled.

1950 Q—Now, in the course of that twelve miles from Bonestell's house up, the water was running down in this channel, and at no place was it getting out of the banks, or overflowing the banks?

A—No, sir; I drove right along the edge of that bank, right at the edge of the slough. There was, once in a while, when I came to cross there it was down in too far. It was narrow there. That was high ground, and there could no water possibly get out. By these other channels I speak of, I mean there was a little depression where the water had just got in. I think it was probably on section 25.

1951 Q—Do you mean the ground was lower down in this direction—towards the west? When you speak of a depression there, do you mean towards the west from the channel that the ground runs lower?

A—Yes, sir. The water was standing in that depression. I don't think the water had got out there but a little ways. It was just shallow. The water was just standing in this depression. After it had gotten into that depression it would be 6 or 8 feet wide, and it might be 100 or 200 yards long; not more than that.

Q—And in order to go into that depression, didn't it run from the bank of the channel there?

1952 A—No, sir—oh, it raised up into that little depression there.

Q—And that was the lowest point in the channel there, I suppose?

A—Yes, sir; in that twelve miles. I followed it until there was no water running over those banks at all. I came there and found the slough with water running in it. On section 25 was the lowest place along there, and a little water had gotten into that depression outside of the channel.

Q—Now, up here at 4, you say it had overflowed again.

1953 A—There I just met the water. I drove right around there. When I came to that place I found the water had just got into that channel on section 4, and I stood there and just seen it running. I could just see it.

Q—Was it running over the bank there at section 4?

A—It was running in that channel.

Q—That is another channel that makes out from this channel at that point?

A—Yes, sir; the two channels are connected together on section 4. It is three miles below Headquarters. If you go direct, it is 1½ miles below Headquarters. If you follow the course of the channel it is three or four

1954 miles. I should think the water was running in this west channel, and had got down as far as the fence. That is the western channel. Didn't follow the channel down as far as Weed Island, but have crossed it in different places. I know about that channel. This west channel, where it runs through Sec. 4 and Sec. 9, is probably about two feet deep. That is a well-defined channel, that west channel; as a general thing all of the way from Section 4 clear down to Tulare Lake. I call it a well-defined channel. There are portions of it that I have not followed, but I have crossed it. I know it generally.

1955 Q—How much water could you run through that channel clear to Tulare Lake without running over anywhere?

A—Well, to confine it to that channel, it would probably carry two feet of water from Section 4 down to Tulare Lake, as far as I know. I don't know of any place on that channel between Section 4 and and Tulare Lake where two feet of water will get out of the channel; there might be some other places where the water would spread out; there might be places where it would be

1956 100 feet or 200 feet, or even wider than that, but I don't think so.

Q—What is the greatest width of the water from headquarters down to Bonestell's in that channel you speak of, the other channel.

A—The middle channel; it is a channel, there is no "middle" about it. Well, there are probably places in that that are 150 feet wide. Such places must be on Section 5, I should think.

Q—How are the banks of that channel on Section 4?

A—They are high banks. The lowest or most sloping banks of that channel are on Section 5 or Section 4. At
1957 that point the channel is 100 feet wide and the banks raised up.

Q—Is it a well defined channel there?

A—Yes, sir.

Q—When it is dry, how can you tell it?

A—You can always tell it when you come to it. There is some obstruction there, sometimes it is tules growing in there, but I don't think there are any tules growing in there, and when the tules are burned out—these tules have all been burned out from the channel; it was just as well defined as you could mark it—defined because it has no tules in it.

1958 Q—Is there any way to define it to recognize it except by the absence of tules?

A—Yes, by the depression.

Q—How can you tell when you come to the outside channel, except by the absence of tules?

A—Well, when you come to the outside, it is bounded by tules.

Q—Is there any other way you can tell when you get to the outside of it?

A—The tules are right on the bank.

Q—How can you tell by the absence or presence of tules, if you find them in the channel as well as out
1959 of it?

A—There are no tules growing in there at the present time, unless it should be a flag or something of that kind.

Q—Whenever you come, at the present time, to this channel or any of those channels that you designate as such, you would ascertain it, because there are no tules anywhere in it?

A—There is not sufficient tules to obstruct the channel.

1960 Q—There are no tules in the channel, are there?

A—There is probably just a few.

Q—Well, there are not so many tules in the channel as there are out of it. Is that the way you tell it?

A—Yes, sir. When you come to compare the two, there is no tules in the channel, and there are out of it. Whenever I found the channel, I found no tules in it. After making an examination of that 12 miles of the slough, I then went down to Dover's. It is on Section 1. It is marked on Map 2, and it is in Township 29, S. R., 22 E. I went down there at night—followed the road. The next morning I started down on the
1961 west side of the slough, down the road and along the canal. I crossed the water at the break, and followed the water that runs out of the canal. That must have been somewhere in Section 16. About Sec. 16 or 21; I cannot say which of those sections in T. 28, S. R., 22 E. There is a break there in the canal. I then crossed the water and went right on down to the end of the canal. I drove down the road to Sec. 20, in T. 27, S. R., 22 E., and there struck the channel; stopped there, and then went to the adobe holes. I examined the channel before I got to the adobe holes on Section 20.

Q—What sort of a channel did you find there, and
1962 what is that place marked there on Section 20?

A—That is Mr. Crocker's hog camp.

Q—You examined the channel from Mr. Crocker's hog camp down to the adobe holes?

A—Yes, sir.

Q—That is the first thing you did? Now describe that channel?

A—Well, that channel right along there is 100 or 150 feet wide. I can't tell how deep, but I should judge that the water to all appearances was 5 or 6 feet deep, and the water was running there, running north.

Q—Was the channel full of water to the top of the
1963 banks?

A—No, sir. The water was five feet deep and 150 feet wide. I saw a high water mark.

Q—How deep was the channel; how much more water would have run in it without overflowing?

A—Well, I saw high water mark above the water, such a mark as water makes in the bank. The banks were not steep, but sloping, They might have been from 1 to 2, or $2\frac{1}{2}$ to 1—something like that, and the channel 150 feet there. I followed it from there down

1964 to the adobe holes. I drove down a little ways and then went across to the adobe holes and saw it was very wide, and I know it must have been very deep there, too, in that place. I drove beyond a little point of high ground right there so that I could look around on this channel from the N. E. quarter of Section 20, back to the Southwest quarter of Section 20.

Q—Well, did you find the channel pretty much the same from Crocker's hog camp down to the adobe holes?

A—Well, it must have been 250 feet wide there or more.

1965 Q—Was it full of water there, or would it have held more?

A—Well, I think from its general appearance it would have held more water there. The side that I was on had high banks at the adobe holes. I was on the west side. The bank was three feet higher than the water. If I recollect right, the bank was pretty steep. There were tules growing on the East bank. At that point the channel was 200 or 250 feet wide ; 250 feet at the widest. I could tell exactly where the outside of the channel was. It was plainly marked, so anybody could see it. There was one point where I
1966 think it was wider than 250 feet. It may have been 300. It think there was 10 feet of water there, running. I then left and came back on the road on the west side and went down and struck the slough again in Section 32, T. 26, S. R., 22 E.

Q—Was this water up at the adobe holes, when you left it, running in any other channel except that one that you have described, from Crocker's hog camp to the adobe holes? Were all of those other channels marked here above there?

A—I don't know, I think there was a little water showing here. There was a little water that I crossed
1967 here, and I think that that water through that channel was running; just a little water. I could just see it.

That is the most westerly channel opposite the adobe holes.

Mr. McAllister—We don't claim that is a channel at all.

The Witness—It is a high water channel, and the water there where I crossed it, there was no tules in it, the water was a foot deep. There was about a foot of water in the most western channel, at the adobe

1968 holes, marked on the map, where I crossed it. Where I crossed it, as near as I could tell, it was probably 10 or 15 feet wide, and a foot of water in it.

Q—What sort of a looking channel was it?

A—Well, there was a foot of water in it. I didn't see that channel at any place where it was dry, without any water in it. I have crossed there when I know there was no water.

Q—What sort of a looking channel was it then?

A—Well, I think where I crossed it at that time, it was all rooted by hogs. There were some tules in it. They didn't grow in the bed there just where I crossed,
1969 but I saw tules in two or three places along.

Q—Did any more tules grow in that than grew in this channel from Crocker's hog camp down to the adobe holes?

A—No, sir. There is no tules there.

Q—None? But there are tules growing in this other channel?

A—Yes, sir.

Q—How do you account for that?

A—It is a high water channel, not a regular channel.

Q—Don't the water run into it every year?

1970 A—No, sir, it don't run in the other one every year.

Q—Every year, when it runs in this one, don't it run in that one?

A—It would run in this one and not in that.

Q—Don't it, every year, when it does run in this channel from Crocker's hog camp down to the adobe holes, don't it also run in this?

A—No, sir. I don't think it does. I have seen it run in one when it was not running in the other. I was wrong about that. I don't think it was running.

Q—When was that?

A—That was along about the 5th of April, this year.

1971 Q—How was the water in this channel from Crocker's hog corral down to adobe holes then?

A—Well, there was water in it.

Q—Was it running?

A—At first, that was my impression, but I think not. The water was standing in both of them.

Q—Standing in these channels, from Crocker's hog corral down to adobe holes, and also in this western bed?

A—No, sir, it was not standing in there, but there

1972 was water in the other. Last Saturday, the water was just running into the channel I have testified about, as though it had just got in there. It came from the other channel.

Q—Had it overflowed the bank of the other channel, the one from Crocker's corral down to the adobe holes?

A—No, sir. I stood on one bank and looked over to the other. The water had not come into this bed from the channel from the Crocker corral to the adobe holes.

Q—How did it get in there?

A—Well, it ran in that channel, I suppose. I sup-
1973 pose that channel intersects the other. It is the only one it could have come in.

Q—This bed comes down and intersects what you call the regular defined channel there?

A—Yes, sir.

Q—How deep does the water have to get in what you call the regular defined channel, before it will go out in this bed?

A—I think the water was three feet higher in that channel. The main channel was three feet higher than it was when I saw it on the 4th.

Q—How deep does the water have to be in what you
1974 call the main channel before it will run in this westerly branch?

A—I didn't go to the mouth. I don't know how deep it is. From the adobe holes I went to Section 33, along the road, and there struck the channel again, the western channel. I found it dry. I think right there the channel was 100 feet wide, and right where I struck it, it was probably 4 or 5 feet deep. The banks slope at a regular slope. No tules in the bed of the channel. I went from there to Section 13, in Township 26, S. R., 21 E. Went along the road. There I
1975 drove right through the bank of the channel, the western channel. There was no water at the bottom of it. I don't think there was any. I think the channel was about 10 feet deep. It was dry, and 100 or 125 feet wide, with sloping banks; no tules in it. That point was on about the south end of Section 13. I then went right on the banks of that channel, north, right on the main channel, across this branch on 13, which is a high water channel, in which water only runs when it is high water. It runs out and runs around a piece of high ground. There is no water in it then. I

1976 could not say just how wide it is, probably 75 or 100 feet, where I crossed it. It might have been 2 feet. The banks were sloping. No tules growing in it. After crossing that I followed right on the main channel down through Section 12.

Q—That would be the western channel of those three on the map?

A—That is the main channel right through Section 12 and Section 1 and into Section 36.

Q—Along the banks of the channel?

A—Yes, sir. I found water along there in 12 and in 1, standing still, I can't tell how deep. It looked to
1977 me like there was considerable depth of water.

Q—How was the channel? Could you describe the channel to me through Section 12 and Section 1?

A—The channel was deep.

Q—How deep?

A—Well, I think it was, within the banks, 4 or 5 feet deep.

Q—How wide was it?

A—Well, the main clear channel, with no tules growing in it, was 100 or 125 feet wide. On the clear channel it would carry ten feet of water. The banks were sloping. Then where it would bend, where it made an
1978 elbow and ran against the main bank, the east bank, and around to the west bank, there it would be a solid, hard ground, and the banks would be so steep that you could not ride up them. In these elbows on the high ground tules were growing.

Q—Now, you have got down to 36. How did you find it in 36, that channel?

A—Found the same kind of a channel there; about 10 feet deep. The main banks would be, I suppose, from 6 to 10 feet deep, in 36.

Q—How wide?

A—I think I just went in there and left the channel
1979 right there. I then crossed right across Sections 36 and 31.

Q—Was there any water in 36?

A—I think there was water standing right there. There was no running water.

Q—Do you know where the water came from?

A—I suppose it came down the channel when there was water running there. Then I went from 36 across 31 and 32 and struck the channel again, the Eastern channel. I crossed 32 where the two channels come to-

1980 gether. The channel was dry there. It was 100 or 150 feet wide.

Q—How deep?

A—Well, it was clear banks, 3 or 4 feet deep, with banks sloping and tules growing on top of the slopes. From there I went and turned right up to the Tule House. I drove up on the east bank and went to the Tule House. At the Tule House I found a deep place in there where the water was standing there.

Q—How deep was the channel there?

A—Oh, I can't tell you. It must be 7 or 8 feet, or 10—the water.

1981 Q—Is it 20?

A—Probably to the bottom of the slough it is—water and all. After I got there I turned around and went right up the eastern bank of this eastern branch a little way. I didn't go into the channel at the junction on Section 32. I saw it—crossed it right there. Where I crossed it was probably 75 feet wide. Between 2 and 3 feet deep, with a well-defined channel where I crossed it. No water in it; no tules.

Q—Do you call that a well defined channel down that way?

A—The water, I think, has to be higher where it
1982 comes out here. The channel that runs across from Section 1 to 32, where I crossed it, was 2 or 3 feet deep.

Q—When you crossed that water, you came back up here?

A—I turned up on the bank then and there, went into the slough right into the channel. I drove right up the bed of that channel, going south on the channel. That is the place I spoke of driving 2½ hours in the bed of the channel. I then turned up here to Salt Slough. It took two hours to drive to Salt Slough. I should judge it was about 12 miles in the channel. It
1983 was dry all the way; no water.

Q—Describe that channel?

A—There is water in one or two holes—standing water.

Q—Describe that channel to me as you found it on Section 5, referring to map?

A—It is between 3 and 4 feet deep, and from 75 to 100 feet wide, I think.

Q—Is it a well defined channel?

A—Yes, sir.

1984 Q—Any branches in it?

A—No, sir. I found no branches in it, just going right up the channel and driving along.

Q—Was there more than one channel through that section?

A—No, sir. I don't think there is.

Q—Just one defined straight channel, with no branches?

A—Yes, sir. My reason for that is, whenever I met an elbow that ran west, I ran against a solid bank. Whenever I went back, and ran to the extreme point on the east, I ran on a solid bank. The channel had slop-
1985 ing banks through that section, and was 75 to 100 feet wide. When we came to the corner of Sec. 7 and 8, I came to about the same kind of a channel. As in section 5, and from there along up into Salt Slough about the same. I found water standing there on the upper end of 18. I stopped to water my horses there. There is a well defined channel all the way up to Salt Slough, and of the same description, as I gave for Section 5. I think there might have been a little water in one or two other places, besides that standing water on Section 18. I never saw it when the banks were overflowing. From Salt Slough
1986 down, 3½ feet of water would run through there without overflowing anywhere. After I got to Salt Slough, I followed right up the channel—Eastern channel. I met the water running. It was somewhere about Sec. 4 or 33, I think. I think it was running on Sec. 33, in T. 26, S. R. 22 E. At the place I met that water the channel was a little smaller, about 40 or 50 feet wide, and I judged about 3 feet deep. I got out there. The water was running over a little riffle into lower ground. It was 6 feet wide, and 3 or 4 inches deep. That is all the water that
1987 was there. I followed that water up, and went clear on up to the break, and found water all the way. I followed up on the west side of the east channel. I kept that channel on my left hand going up. I crossed this channel on Section 4, going from the west channel into the east channel. Where I crossed this channel, there is not a great deal of difference right there. It was well defined, no tules in it right there, and probably 2 or 3 feet deep. There was water running in the cross channel going down into the east channel. That water came from the break in the canal. It was run-

1988 ning out of this western channel. I followed up the eastern channel and found water there. I followed it right along, keeping the water on my east. I followed the eastern channel up to the break.

Q—How many different channels was that water that came from the break running in from where the break was down to where you found it?

A—I followed it up.

Q—How many channels was it running in?

A—One, when I found it.

Q—About how many channels to your knowledge?

A—This water which was running down from the
1989 break.

Q—It was running in two different channels that you know of?

A—Yes, sir, which came together down below. When I got opposite Goose Lake, it was overflowing on Section 15.

Q—That was the first place you found it overflowed?

A—Yes, sir, on Section 15. It overflowed the bank there.

Q—How much of the country was submerged with it there?

A—I drove right along. I did not want to let the
1990 water get to the west of it. I wanted to see where it came from. I kept it to my left. I was traveling up on the western side of the slough.

Q—How much of the country would you find submerged with that water?

A—Sometimes 100 yards outside of the channel. I think that was the amount of it.

Q—How deep was the channel, the place where it was overflowed on Section 15?

A—I can't tell you. I saw a cow or cattle running across there, and it was belly deep. Two feet deep, probably, that is, the channel.

1991 Q—Where the water was outside of the channel—had gone outside, was it standing still, or had it any motion or current?

A—Well, it appeared as though it had just commenced to overflow, and it was working out very slow.

Q—Which way? all around? Everywhere?

A—Yes, sir; just running to waste.

Q—Running over it there?

A—Yes, sir. The widest overflow was on Sections 15 and 22. When I got up higher on 28, the channel

1992 had high banks. There was no overflow there. When I got up to Section 33, I found some overflow, but I drove right through it. I didn't examine the width of it.

Q—How deep was the water in the channel at the place you found the overflow on Section 33?

A—I should think it came up to the bottom of the buggy. From there I went up to that point. I should judge it was above the corner of the fence; which is on Section 34, Township 27, Range 22. Then I crossed and went on to the high land on the east side. I crossed the channel on Sec. 3, Township 28, Range
1993 22. There was some water outside of the channel there; a channel a foot deep. I crossed the channel there.

Q—How much of the country was covered with water that was overflowed?

A—Well, it would run out, maybe for 100 yards—300 feet or 400 feet.

Q—From there up to the break was any water overflowed?

A—When I got on the outside there, I stood on high ground. Then to test where the water had come from. I went right across there to high ground; where
1994 I was certain that I was on high ground. It was somewhere above the fence. The fence, I believe, is on Section 4. Then I started and went across, clear across the slough to the break above the break.

Q—Why didn't you go up through here? (pointing to the map.)

A—There is where the break has been running for sometime, and tules have grown in through that country there, so you can't cross directly. Even if you could cross the channels, it is hard work working through the tules.

1995 Q—Do you know whether there is any water standing in there from Section 21 down to 24, in Township 28, S. Range, 22 E.?

A—I suppose there is some.

Q—Isn't it standing all over the country around through there?

A—No, I don't think it is round all over the country, but then I think there is water standing outside of the channel there. When I crossed over to the east, I went south, I think somewhere about Section 11.

Q—After you got over on the east side, you came

1996 back above the break, you say, to the west side; followed the water around?

A—Yes, sir.

Q—How far did you go north then?

A—When I struck the high ground?

Q—(Int'g.)—Before you got to the break?

A—I went south from there after I got to the high ground.

Q—Then crossed over again to the west side, didn't you, above the break?

A—Well, as I understood, I was crossing the swamp, according to your question.

1997 Q—I understand you first crossed the swamp over to the east, going to the high ground?

A—Oh, I crossed the channel and went east up to the high ground. There was water to the north of me, because I had left the water.

Q—How far did you have to go from where you got back to the west side, before you came to water?

A—I don't know. I struck high ground about a mile or a mile and a half above the break. I would have to go about a mile and a half to the north before getting to the break, from where I struck on the west side, after crossing from the east.

1998 The witness's attention is called to Sections 7, 8, 9 and 10, in Township 29, South Range, 23 East, and asked: Did you find any channel in any of those sections?

A—I did not cross there. I did not go there at all. I have not been there lately.

Q—Were you ever there?

A—Yes, sir. I have been there at different times, Can't tell exactly what was the last time. I think it was about a year ago.

Q—Was there any channel there then?

A—Yes, sir.

1999 Q—A well defined channel?

A—Yes, sir.

Q—Where was it? Where did it go?

A—I can't say just exactly. It might have been in Section 8 or Section 9. I could not say exactly.

Q—Was it on Section 8 and 9, both?

A—I could not say whether I went on those sections at the time. I have drove along there. The water was not running in the channel when I saw it. The channel was 25 or 30 or 40 feet wide. I can't say exactly. It

2000 was pretty deep. I drove right into it. It was 3 or 4 feet deep. Just on one side there would be sloping banks. On the other would be perpendicular, unless it happened where a curve runs. I have been on Sections 25, 35, in Township 28, Range 22; and 19, in Township 28, Range 23, I think. I can't tell exactly when. But I have been across there—well, I don't know as I have been across right in there, I have crossed a little lower down. I found a channel in there. Along below the fish pond, and there in Section 27. There I had to dig the bank down to make a road for the teams to cross. It was a deep channel. Here was a channel where it
2001 was four or five feet deep. I selected the shallowest or best places to construct a wagon road across it. Where I constructed the wagon road across the channel was probably 100 feet wide; the banks were almost perpendicular. I think I have been at the corner between Sections 19 and 25, I just spoke of, and running along the line between 24 and 19, and then across 13 diagonally, and across 11 diagonally. But I can't say positively. There is a channel along there. I think, from what I recollect of it, that there is Broder's Island there.

Mr. Garber—Broder's Island is there; Mr. Haggin,
2002 will you run a pencil over the line for him if he does not know where it is?

Mr. Haggin—Yes, sir.

The Witness—No, sir; that is—

Mr. Garber—Did you find any channel in through there?

A—No, sir; not through that place.

Q—What sort of ground through there?

A—Well, there is where I got outside of the work; outside of the tule land. There is tules through there. I could not say just exactly where. But when you get out you begin to find high ground.

2003 Q—When were you last there?

A—I just rode up through section 11 here, and I think, 14 as near as I can tell, and 23: I think it was along—it was not dark, but it was along toward evening. I think it is just south of what is called the Fish Ponds.

Q—Now, commencing at section 16, Township 28, South Range, 22 E., and running across Section 16 to to the corner of Section 10, through Section 10 and through Section 3, all in Township 28, South Range, 22

2004 East; when were you there—when were you through that place?

A—I was not through that place.

Q—Have you ever crossed a channel through there anywhere?

A—Yes, I have. I have crossed through there.

Q—Did you find a channel there, or how many channels did you find there?

A—I can't tell you just how much I went through there.

Q—Can you tell me whether there was a channel there?

2005 A—Yes, sir. I cannot say exactly how many, or whether there is more than one. I was going to build a wagon road through there, and I went in there until I found this channel, and I found it was deep and steep, and that I would have to fill up the channel almost, so that the teams could cross it. I think that channel was four or five feet deep. It was probably not more than forty or fifty feet wide. Perpendicular banks, I think.

WEDNESDAY, April 27, 1881.

2006 Cross-examination of

S. W. WIBLE

Resumed.

Mr. GARBER—Q—Mr. Wible, what were the respective several water ditches or canals that you referred to in your direct examination as having taken water out of this stream?

A—Well, I think that the direct reference was to the Calloway and the Pioneer. Those were the only ones that I mentioned. I think there were other canals taking water. I know that the Stein Canal has taken
2007 water out, and Buena Vista; also Kern Island Canal, and South Fork Canal, the Beardsley and the McCord. Then there was some small canals. I don't know as I can just call them by name. The James, and Dixon, and Farmers'. I could not say positively whether James and Dixon were taking water direct from the river or not. The James, and Dixon, and the Johnson, I think they run together. The Farmers' Canal—I understand that is closed up. They used to take water. The Joyce and Dixon Canal is one, and the James

2008 Canal, that is another, and the Meacham Canal, and a smaller ditch called the Wilson and Parish, and I may have known the Castro Canal, a Mexican canal. I think that is the canal that is on the west of Chester avenue. I think that is what is called the Castro Ditch. That is one that I had in my mind—a small canal—also the Jones and Tuckey.

Q—The Emery?

A—I don't think I ever saw water running in the Emery. I didn't refer to that. And the Baker and Noble and the Anderson Ditch; but that is a small canal that runs in from the Anderson field. That is not one
2009 of the canals that I had reference to. I know where the Plunkett Canal is. I don't think there is any water running in that—not from the river. The Goose Lake Canal had water in it at high water. I know it is there, but I did not have any particular reference to it.

Q—You spoke of the canals having taken water away from the river. Was that one that you had reference to?

A—No, sir; I don't think I had any special reference to that.

Q—The Railroad Canal is one of them?

A—Yes, sir. That takes water out during high water
2010 only. I included the Wible Canal. That canal has taken out water during the time it was plenty in the river. I know where May's Ditch is. I don't think I ever saw any water in it. I never saw any water in the Butterfield Ditch. I don't know that I can locate the Gates Canal.

Q—Where is that Pioneer canal, on this map? [Referring to Map No. 4.]

A—That is the Pioneer canal. It comes out of Section 6, Township 30, Range 27, right near the line. Hold on, I think that is not correct there; I thought I saw a mark. It comes out of Section 1, in Township
2011 30, Range 26. It comes out of New River. From there it runs along the Township line, the south of that Township between 29 and 30. It runs about as marked on this Map No. 4, along near the Township, along down to there, past Township 29, down south of Township 29, the south line of Township 29. It runs west through Ranges 26 and 25, along that Township line; along that south line. It runs in that tier of sections next to that Township line down to about Section 6, in Township 30, Range 25.

2012 Q—Near this Buena Vista Slough, doesn't it?

A—No; it is a good way from there. I don't know whether it runs down that far. It may be laid out further on the map than what it is constructed.

Q—Do you know how far it runs down?

A—If I recollect right, I constructed that canal, the Pioneer. I think it is about 12 miles long. I don't think it is any longer. I think that is the best of my recollection.

Q—At what time was it that you said that you gave it as a reason why there was not water enough down to your place because those canals had taken it out? What
2013 time did you refer to?

A—I don't know that I referred to any time.

Q—I mean in your own mind.

A—Well, I refer to different times when there was so much water in Kern River that they could not take it out. I got water down there.

Q—When was the first time that you had reference to and meant to say, that by reason of what the canals got, there was too little down at your place?

A—Well, it was in 1879. I got very little water.

Q—Was that the first time that you can say that by reason of what the canals took out you were deprived
2014 of water?

A—Yes, sir; I think that was.

Q—In 1879, what time?

A—1879—No, sir. There was a period before that, in 1878, the water failed entirely; somewhere about the 1st of July, in 1878.

Q—And you said that was caused by these canals?

A—Yes, sir. There was an abundance of water.

Q—How much water was the Pioneer taking then?

A—I could not say just, because I think they were getting less water than any of the others further up
2015 the river, and at times I could not say how much it was taking then. Well, sometimes there was only just stock water running. On Section 5, I don't think the water went further in that canal than somewhere about Section 5 or 6, in Range 26. There, even, it was all used there, and only enough for stock water even at that time. I know further that at the same time on these ranches we had to work pumps; that there was not stock water in there. I don't know exactly whether it was 1878, but I think it was in 1879.

Q—We are speaking about the time in 1878 when

2016 you said that the canals took so much water that they deprived you of the water ?

A—Yes, sir.

Q—Now, at that time, do you mean to say they were pumping up there?

A—I can say they were in 1878.

Q—What water was running in the Pioneer at that time, if you know?

A—It is hard for me to tell.

Q—Then you don't know anything about it?

A—Yes, I do.

Q—What do you know about it?

2017 A—Because I took water whenever I could get it myself from that canal, and I know that for a portion of 1878, when I wanted water to save my crops.

Q—About what time in the year was it that you speak of that you say the canals were taking so much of it? The canals generally? What time in the year was it you speak of?

A—Well, sir, that time was—there was water. Other parties had water in June, 1878, and I think I had a little water myself, but not sufficient to save my crops. That was June, 1878.

Q—What time of the year is it that you say that 2018 the canals were taking the water so that you didn't get it? What time of the year did that commence?

A—That was the Pioneer? Have you referred to that?

Q—I refer to any of the canals. You say that there was a time in 1878, when the canals took so much water that you didn't get it? What time of the year was that?

Mr. Houghton—Mr. Garber, he has referred to the fact that he did not get it on the ranch, and also that he didn't get it below. Which do you mean?

Mr. Garber—(To the witness)—Which do you 2019 mean?

A—Well, I did get a little water on my ranch.

Q—I was not asking you about your ranch. I want to know down below there. What time of year do you refer to when you say the canals were taking so much water out that you didn't get any down there at headquarters? Tell me first what time in 1878 you referred to?

A—I think there was some water in June, 1878, and the first of July, 1878, but along about the first of July, 1878, the water failed entirely down there.

2020 Q—At that time you say that the canals were taking so much water that you could not get any?

A—Yes, sir. At that time I think the Pioneer was taking what it could carry. How much it was taking I could not tell.

Q—Can you give me any idea about that at all, or don't you know? If you don't know, just say so.

A—There was some water there. I don't know how much. I know that there was water in the Kern Island Canal at that time. I might be able to refresh my recollection and tell you how much. I don't know how much. I first saw that canal in 1875. It takes
2021 water from Kern River, just at the bluff and above the town of Bakersfield. It carries it through and along the south fork towards Kern Lake, and nearly to the lake.

Q—What is the size of that canal, do you know?

A—Well, it is—the new construction I should judge is about 40 feet wide on the bottom.

Mr. Garber—How deep?

The Witness—Well, I don't—it used to run in the slough or South Fork.

Q—What depth?

A—I have read the gauge, and I think 2 feet and
2022 eight-tenths.

Q—Would it carry any more if it was put in?

A—Well, the banks are high enough there; I don't know whether there is any lower places or not. The banks are not high enough. The water in this canal has been used to irrigate the land along that canal. This is true about all the other ditches—all that I have mentioned. The water has been used to irrigate the land lying around where the canals go.

Q—When did you first see that Stein Canal?

A—I think that canal was constructed some time in 1875. I saw it when it was constructed. First saw
2023 the James Canal in 1875. The James and Buena Vista canals are about correctly represented upon this map, No. 4.

Q—Are the canals you have mentioned correctly represented upon this map No. 4?

A—Well, sir, I should say they were about correct. There might be some places that I am not familiar with. The Calloway Canal is not represented here as it is. It only goes into the slough there. I refer to the slough that is running down from the railroad

2024 bridge and intersects the river again at a point just above the Goose Lake channel. That slough goes back into the river again. I don't know that it has any name.

Q—What is the trouble with the map in regard to that?

A—That ends the canal right there, as it is delineated here.

Mr. McAllister—Ends it at the slough? Is that it?

A—Yes, sir.

Mr. Garber—Where should it be?

A—It should run above the railroad bridge, and con-
2025 nect with Kern River there; as far as it is shown on the map it is correct.

Q—It is connected with the slough as put down

I suppose it is constructed to carry about 2½ feet of water, or 3 feet. The Stein Canal takes water from—connects with Old River. There is a headgate, I believe, at the river, in the mouth of Old River; and it runs down a short distance in Old River, and then diverges into an artificial channel. That is, I suppose, somewheres about a mile from its junction with New River; and it carries the water down to near Buena Vista and Kern Lake. I judge that canal is about 25 feet on the bottom.

Q—Where are these trees that you refer to?

A—I don't know as I called them especially trees; I
2027 know of them growing. They are right in the bed of New River, from New River or Pioneer Bridge down. I did't say trees; there are willows. I have seen them from six inches high—willows growing until, I suppose, 6 feet and maybe 10. These that I refer to, those small ones, have all grown within the last two or three years. There are some right below the Pioneer Bridge in New River. The Pioneer Bridge is on Section 1, Township 30, S. Range, 26 E. It was below the Pioneer that I find this growth of trees. In going along there I noticed during the summer season that they

2020 Q—At that time you say that the canals were taking so much water that you could not get any?

A—Yes, sir. At that time I think the Pioneer was taking what it could carry. How much it was taking I could not tell.

Q—Can you give me any idea about that at all, or don't you know? If you don't know, just say so.

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A—Yes, sir.

Mr. Garber—Where should it be?

A—It should run above the railroad bridge, and con-
2025 nect with Kern River there; as far as it is shown on the map it is correct.

Q—It is connected with the slough as put down there, and then it also connects with the river above; is that so?

A—Yes, sir. I know from the connection there. I am pretty certain that it is correctly shown, for some distance, for I have run a line over that myself. There is a head-gate on Section 22, in the slough.

Q—Is that the one that you spoke of in your testimony the other day?

A—No, sir. That is not the head-gate that I spoke
2026 about where I said I found a head-gate clear across the river. The wing-dam is above the railroad bridge.

Mr. McAllister—That is in the river?

A—That is in the river.

Q—Now, you said there were trees growing in certain places along the course of this river, New River, and that the cause of the growth was by reason of these ditches taking out the water?

A—Yes, sir.

Q—Where are these trees that you refer to?

A—I don't know as I called them especially trees; I
2027 know of them growing. They are right in the bed of New River, from New River or Pioneer Bridge down. I did't say trees; there are willows. I have seen them from six inches high—willows growing until, I suppose, 6 feet and maybe 10. These that I refer to, those small ones, have all grown within the last two or three years. There are some right below the Pioneer Bridge in New River. The Pioneer Bridge is on Section 1, Township 30, S. Range, 26 E. It was below the Pioneer that I find this growth of trees. In going along there I noticed during the summer season that they

2028 grow up almost across the river, just below the bridge. It might have been ¼ of a mile or ½. The brush that I saw growing is where there were trees put in to make wing-dams, and then when those trees would wash away from there, there are places they would lodge, and form a sand-bar in the channel, this brush was put in at the Pioneer and in other places. It is where these trees or brush have landed that the sand bars are formed, and then this new growth has sprung up. This has been within the past 2 or 3 years. During the summer season, when the river was dry, I think this growth would go nearly across the river.

2029 Q—Well, didn't a similar growth take place at various places in that river before the time that you speak of; always, in fact?

A—No, sir. Before I saw it. When I saw it, in 1875 or 1876, there was no such growth, no such brush in the river.

Q—Was there no young brush or trees growing in the river before that period you speak of, along the bed of the river, at various points?

A—No, sir; there was no such brush or sand-bars formed.

Q—Wasn't there all the time from the first time you
2030 saw the bed of that river, every year, sand-bars forming and new growths springing up at various points in the river?

A—Well, I noticed that on the islands, that I noticed when I first came to Kern Island, the growth is much larger now than it was then. There is more of it. There are more islands.

Q—More islands have been springing up in the river since when?

A—Since 1875 or 1876.

Q—When did it commence that change?

A—Well, sometime in 1876. I cannot say positively
2031 that there was any in 1875. I noticed this change since 1876.

Q—Then in 1876 you noticed a change there, and that change consisted in part of the fact that more islands were formed and more of this little brush grew there?

A—Since 1876, there have been more islands formed and more of this little brush grown up.

Q—It commenced in 1876, then, did it? Has it been going on ever since?

2032 A—I would say that I noticed these growths since 1877.

Q—Well, you noticed it then in 1876?

A—Well, I could not say positively that I did. I think such a growth was taking place in 1876, but I can't say.

Q—Well, then, you didn't notice it in 1876?

A—I think there was; for what calls my attention to it is this: In 1875 I built a canal of my own, and sometime in June, I think it was, I put brush in there myself—into the river. Then, after considering the matter, and putting the brush in, I thought, the 2033 channel being shallow, that this brush would form islands, and eventually choke up the river. I have abandoned that idea since that time, and opposed brush going in in any wing-dam. I changed my opinion in regard to the dam on account of the damage it did to the river. I did not, at the time, consider the effect of putting brush in to make wing-dams, but in considering, I saw, and I knew that they did form sand-bars, and that was the reason that I abandoned the idea of putting brush in.

The Court—The witness stated that he first put brush in, but afterwards saw that it formed sand-2034 bars, and for that reason he abandoned the use of it.

The Witness—I did put brush in there when I first commenced building dams, or wing-dams. After considering, and finding bad results to follow from it, I abandoned that idea of putting brush in there, and have opposed putting brush in ever since that time I found out the results that would follow from such a course.

Q—Did you not say a few moments ago that your first opinion was that it was best to put brush in and afterwards put sand on top of the sand-bar thus formed?

A—I think my answer was that that would make a 2035 very effective dam.

Q—Now, has it not been the case since you have been familiar with the river, that logs have been washed down, and sand bars formed and a new growth springs up at various places in the river?

A—I have seen logs that I supposed drifted down and lodged in the river. I know they have formed sand-bars, and I know that on these sand-bars a growth of willows is springing up. I can only recollect one instance. I don't think the log floated. I think it just

2036 undermined and worked into the end of my head-gate.

Q—I am speaking of the whole bed of the river since you have known it. Has it or has it not been the case ever since you knew it that at various points on the bed of the river, logs have lodged, bars formed, and a new growth sprung up?

A—Ever since 1875 I have known of brush and trees to be put in there. I never saw any logs floated. I know this brush lodged in the river and formed sand-bars. I don't know that ever since 1874, logs have been every year floating down and lodged in various places
2037 in that river. I don't think there are any logs came down the river.

Q—Before when?

A—Well, there is logs there. I suppose they came down before 1875, because I saw them.

Q—Has there been any difference in it since you knew the river as to the amount of new growth springing up in it?

A—Yes, sir.

Q—When did that change begin to take place?

A—Since the water has been taken out.

Q—When, in regard to time?

2038 A—Well, in 1877—probably in 1876—was the first I took any notice of this. I think that I have noticed where this brush I speak about had floated and formed sand bars, but I don't think the first year that there would be much growth. It would probably be the second year that there was any growth growing on the sand-bars.

Q—Do I understand you to say that in 1876, you noticed only at this one place this new growth, or do you mean to say you noticed it elsewhere in the river?

2039 A—I may have noticed it elsewhere. I cannot call any particular notice of it.

Q—Then you only refer to this one place?

A—I think that is about all, and I am not positive whether it was 1876 and 1877, that I first noticed this change. I think the brush was put in in 1876, and the formation of the sand-bar has been going on ever since, unless it was high water enough to remove the brush and sand-bar entirely. It has been going on ever since.

2040 Q—How high would the water have to get in order to remove that?

A—Well, when the bank is full, the bottom of Kern River is a formation of sand. And unless this brush happens to settle in the deep places, settles on top of this sand, when the high waters come, they would undermine it. When the brush is deep, or settles in a deep place, it sometimes remains there. I think, probably, that I can refer to some places where I know of brush having lodged, that are in there to-day, and a quite respectable little island has formed on it and around it. When the high waters come, they will re-
2041 move some of these obstructions.

Q—Yet I understand you to say that if the canals had not taken the water out, there would have been enough water in the river to tear out these obstructions and prevent this additional growth.

A—Yes, sir. During the time when these heavy floods come, they will remove a portion of these. I don't say they will remove all of them, but they will remove a portion of them, and if the water continues to run, it will keep the channel clear.

Q—Well, do I understand you to say that the reason why the increase of growth took place was because the
2042 canals took out water which otherwise would have gone down the river?

A—Yes, sir.

Q—But if there had been high water, that would have removed the obstruction and prevented the increase of growth?

A—I think it would have removed them, perhaps not all of them. There would have been some increase in growth, even if the canals had taken no water out. But there has been a greater increase of growth owing to the fact that the canals have taken water out since 1876. There has been high water
2043 in 1878 and 1880, and there has been, I think, for a day or two, high water in 1881. I don't think the canals took off much high water during the time of the high flood in 1878. The canals were damaged, and they shut down their gates. This only remained for a few days, and then they repaired their gates and drew the water out again. The high water in 1878, was from February until along toward June.

Q—Well, why didn't that clean out the channel and

2044 prevent the growth just as effectually as it used to do before the canals took the water?

A—Well, the brush was not in before they commenced to take the water. It had not these things to remove.

Q—Then the reason why the growth has increased of late years is not because of taking out the water, but because of putting in the brush, isn't it?

A—Putting in the brush, and there has not been sufficient water to wash them out. If it had been long continued, it would have removed an immense bed of sand out of Kern River. In 1878 high water
2045 continued in February, I think, until sometime about June, when it commenced to go down.

I don't think, if all the water had been permitted to run down, it would have removed all the obstructions.

Q—Then the cause of this increase of the growth and change in the channel, of which you have spoken, is not owing to the amount of water abstracted by the canals, is it?

A—Yes.

Q—How can that be, if there was enough water without counting that taken by the canals, to sweep away any obstructions which water could sweep away?

2046 A—Well, was constantly more being put in.

Q—Then it was what was put in, and not the water which was taken out, that accounts for the change in the channel, isn't it?

A—I think they both had the influence, the water taken out and the brush put in. I think that is just exactly what formed it.

Q—And that commenced, you say, in 1876?

A—Yes, sir; there was brush put in in 1876. I mean this change which has been noted. At that time it is impossible for me to tell how much water had
2047 been taken out. I know water was taken out, but how much, I can't say. I know sometimes it was all taken out. I don't think the canals took it all out in 1876.

Q—Then there was no time in 1876 that they did take it all out. Yet you undertake to say that what they did take out in 1876 was the efficient cause of this change, which then began to take place in this channel?

A—I didn't intend to say that at all.

Q—Then you didn't intend to say that what the canals took out in 1876 was the cause of the change which then commenced in the channel?

2048 A- I don't think there was water enough took——

Q—(Int'g) Please answer that, yes or no, and then explain.

A—Well, I would say yes, and then I would wish to state this, that they did not commence to put in the brush until the water commenced going down in the river. Then the brush was put in, and there was not sufficient water in the river to remove it any great distance, and they remained there, and in 1877 they were not washed out—probably some of them.

Then there was more brush put in there, and there has been more brush put in every year, and there is
2049 more or less of it has lodged in the channel of Kern River, from here to Buena Vista Slough, or from Pioneer Bridge to Buena Vista Slough. That was not the cause of the drift pile at Weed Island. I never saw that drift pile. I saw some of the results of it. I saw a few of the logs that were not burnt up. I hauled them out—had them hauled out for wood. I don't think that the taking out of the water in these canals had anything to do with the drift pile at Weed Island. I think that was before any of the canals were constructed.

2050 Q—What did that consist of? Piles of logs, and wood, and trees?

A—Well, I suppose it was logs. That is what I found there, of it. It must have come down the river away up in the Sierra Nevada mountains, I suppose, and in times of high water, I understood.

Q—Do you think that those trees could be taken clear down to Weed Island and lodged there and form drift piles and bars there, and yet none be lodged up higher here and form bars along in the other parts of the river?

A—I see logs all along the river outside of the chan-
2051 nel. I see some in the channel or along on the islands in the channel.

Q—Now Mr. Wible, we will commence on that map, No. 2 or 3, whichever you find it on, at the edge of the swamp land, on the line between section 3, township 28, range 22, and section 34, township 27, range 22, running thence north parallel with the section lines, through sections 34, 27, 22, 15, 10, and half way through section 3; thence to the southeast corner of section 33, in township 26. Have you traveled through there?

A—I have probably traveled through a portion of it,

2052 through the west of Sec. 10 and the west of Sec. 15. I may possibly have crossed some of these sections, but I have been on Sec. 3.

Q—Have you been on Sec. 22?

A—I may have been on Sec. 22, but I can't say positively.

Q—Now, did you find any channel there through Sec. 15, anywhere?

A—Yes, sir.

Q—Which way was the channel running?

A—Running north and south too. It is marked on this map 3.

2053 Q—Sec. 15. Now describe that channel through that section.

A—That section there, the channel was full of water. I am speaking of last Sunday. Somewhere opposite Goose Lake here. Last Sunday that channel was full of water when I drove to it. And I followed right along the west side of it, keeping the water on my left hand going south, and the water in places had run out of that channel. I would circle around and keep the water on my left hand.

Q—Was there a well defined channel through section 15 there, and 22, as marked on that map?

2054 A—Whenever I circled around the water there, and went a little ways, then I drove directly to the channel until I came to the channel. Wherever I drove to it, it was a well defined channel through sections 15 and 22; that particular channel I could not say exactly how many places I drove on it on sections 15 and 22. On section 10, I think I drove through that.

Q—At how many places did you go to the channel on these three sections?

A—On section 10, I think I drove on the channel right on the bank.

2055 Q—What sort of a channel was it?

A—A well defined channel, I think; pretty full of water.

Q—Steep or sloping banks?

A—They were both.

Q—How deep was the channel?

A—Two feet and a half, probably.

Q—How wide was it?

A—Well, 40 feet.

Q—How was the channel on section 15?

A—About the same as on Section 10, when I drove to it; in Section 22, I can't say positively whether it

2056 was on that line, between 21 and 22. The channel was about the same as it was on 10 and 15, whenever I drove on it. The water was overflowing the banks at quite a number of places on 15 and 10. Where it was overflowed, the water was from nothing to 6 or 8 inches deep. I followed right around the water line; at the lowest place where I saw this channel, where the cattle was crossing, it was two feet or two feet and a half deep.

Q—How could the water have been only 6 inches deep, and still overflow?

A—This was on the overflowed land. Inside the
2057 channel, at the lowest place, the water was about 2½ to 3 feet deep; it might have been 4; I cannot say how deep at the shallowest place where it was in the channel; don't think I saw any place where it was as low as 6 inches deep in that channel. If there was any such place I didn't see it; don't believe it was less than 2 feet deep at any place; might not be more than a foot and a half.

Q—On Sec. 10, between 10 and 15, there is a channel marked, extending towards Goose Lake, on Map 3; there is a mark there, at any rate, extending towards Goose Lake?

2058 A—I think very likely there is; I don't know if there is a channel extending from that point clear on to Goose Lake; have not been over that ground.

Q—Now, we will return to the S. E. corner of Sec. 33, running thence through Sec. 33, and through Sec. 32, crossing between Secs. 30 and 31, to the eastern edge of the swamp land. Have you got that line?

A—Yes, sir; it is pointed out here; near that line is a corral called Round Corral; just passed from Epperly's camp outside from the swamp lands.

Q—Have you passed along that line last described?

2059 A—No, sir, I have not; I have been on the east side of it. I have been along there on the west side and on the east side, and on the eastern channel and on the western channel, at the point mentioned; the eastern channel on Sec. 33, and the western channel on 31 and 30, on the line between 31 and 30; I have been on Sec. 33, and up the channel there.

Q—There is a channel there?

A—From the north end to the south end.

Q—There is a channel in Sec. 33, is there?

A—Yes, sir.

Q—Does it run clear through the section?

2060 A—Yes, sir.

Q—What sort of a channel is it ?

A—Well, in Sec. 33, somewhere on 33 or 34; in Sec. 4 there is, where I met the water running; I was driving in that channel up to the time I met it; I drove my horse a short distance alongside of the water in that channel.

Q—In that Section 33 how was the channel ?

A—Well defined, about 75 feet wide; from 3 to 4 feet deep, sloping banks, but well defined; the channel is clear. I saw no overflow along there. I don't think there is a channel in Section 32. There may be a
2061 high water channel, I don't know whether there is or not. I don't think I passed over that, I think likely I saw some water in holes on Section 32.

Q—How much water did you see standing around on Section 32 ?

A—I did'nt see any ?

Q—Then you didn't see any water even standing on Section 32 ?

A—I don't think I did.

Q—How about Section 31. Did you find a channel through there ?

A—Yes, sir,

2062 Q—I want you to describe to me the channel on Section 31, where it commences and where it leaves the section and what part of the section it goes through ?

A—I came on to that channel, at the S. W. corner of Section 31. It is somewhere about 35 feet wide and it was probably 4 or 5 feet deep.

Q—Was it a well defined channel that through Section 31 ?

A—I left the channel right in here somewhere. [Pointing on the map.] I left the channel in a short distance of Section 31, from the south end of it. Well, I
2063 don't know whether it was the south end of the line or not. I left the channel in the S. W. corner of Section 31. I could not say just exactly where. I just drove to the channel, and just drove a little ways and back to the road and continued; as far as I saw the channel on this section, it was a well defined channel with steep banks. Right where I first struck it, it was probably 5 feet deep. There was no overflow there, no water. I, at one time, saw the water when I think there was water outside of that channel. That was in June —May or June, I think, 1877.

2064 Q—How much of the country around there was covered with water then ?

A—Well, I could see the banks on the opposite side ?

Q—How much of the country around there was then covered with water in 1877 ?

A—Well, I think I could see water there in the tules beyond that.

Q—How large an area was then covered with water, as far as you did see. How much of the country was covered with water ?

A—I could not say how much water was beyond this
2065 channel on Section 31. It might have been—I might have seen the water where the tules were clear, or something of that kind, may be I saw quarter of an acre. Probably not more than an eighth, or probably not more than a tenth of an acre. There is high ground there between 31 and 32. That was not covered with water. I am positive about that.

Q—Then further along than that it might have been covered with water, for all that you know, at that time ?

A—It might have been, I don't know.

Q—How was it along on Section 30, or between 30
2066 and 31; the last time you were there, did you find any overflowed water anywhere through there ?

A—I did not follow the channel. I didn't pass the channel there. I have never passed a channel there, I don't think, I have passed it on the road.

Q—You don't know whether, when you were there last Saturday, there was any overflow there or not ?

A—There was not any water. There was no water above there, and I don't see how it could get there.

Q—Now, we will take the corner between sections 6, 5 and 8, township 27, range 22. Going from there to
2067 the east about a mile, and to the west about a mile, what was the state of affairs there, were you through there last Saturday ?

A—I didn't touch a channel there at all.

Q—Did you see that place last Saturday—that part of the country a mile each way from that point ?

A—I left the channel at the adobe holes, and did not touch the channel along there until I came to the adobe chimney in Sec. 31. As to that mile of country or so going on east that you are speaking about, I don't know how that was last Saturday.

Q—Have you ever seen any overflow there ?

2068 A—Probably. Well, there was probably an overflow there when I was not there in May or June, 1877. I know there was water there, but to what extent I cannot say. I don't know what kind of a channel it is right there. I didn't go there. I have been on that channel, and to the best of my recollection it has sloping banks. I cannot say just at what point, or whether I have been there or not. I have not followed the channel right directly through there. Water was first run into the canal of the Kern Valley Water Co. I think, in January, 1878. It failed in July that year. They ran it until that time. I could not say how much
2069 water we ran in there that year. Part of the time there was a flood, and part of the time low water.

Q—Did you let the water through your head-gate that year—the one where your canal leaves the slough?

A—Yes, sir; I don't know that I turned any water out there into the slough in January, but I did in February, 1878—turned it into the slough at that head-gate. I turned it in there to repair a break. I turned it in there also for other purposes. Mr. Bonestell, I think, commenced farming there in 1878, on Sec. 24, at about Weed Island—the lower end of Weed Island. I think he plowed 100 acres. I gave him the water to irrigate
2070 that. I didn't sell it to him; I just made him a present of it; just ran the water down. He came and asked me for water, and I run the water down there.

Q—Was that constructed to give away water?

A—I suppose the men that had control there never ordered me to charge for water, because I never had enough to sell; I had lots of water in 1878; did not sell it; did not have any one to buy it. No one farmed there except Mr. Bonestell and Mr. Souther; Mr. Souther farmed on Sec. 11. I think that was in 1878. I can't give the amount; probably from 60 to 75 acres.
2071 I think he sowed barley first; finally he put in corn; neither one matured; there was not water enough.

Q—Wasn't it a fact that he quit there because he was drowned out with the water?

A—No, sir; he was not; he was not driven away by too much water, not on Sec. 11; he was driven away by too much water from Sec. 32; that was in 1878; he did not have any crop in; I saw some corn growing, and that was all. That was the only place that he was driven out by water. I had a break in the canal, and turned the water into the slough and it overflowed at that point; that is just below. The water came out

2072 here where the drift was at the head of Weed Island, and ran down on the east side of that channel and overflowed a portion of Sec. 32.

Q—The channel was not big enough to carry the water through there then?

A—Yes, sir; I turned in the water and it would not carry it. I shut down and in a short time I turned all the water that came right into that channel.

Q—There was more water coming down the slough above your canal than your canal would carry that year?

A—Yes, sir; the main channel. Mr. Crocker did
2073 some farming that year on Sec. 10; that was in 1878; he sowed some alfalfa, and I think he sowed some barley. I gave him some water to irrigate. He did not make any crop. The alfalfa grew; the rest died out for want of water.

There was preparations for farming made below there, but I don't think any farming done, Mr. Dover fenced in about 20 acres, and I think plowed most of it, at his place, and the canal broke, and the water ran in on him, and when we got that repaired the water went down and they had no water to do anything with.

Q—What other preparations were made there?

2074 A—Well, that was about all. That was the extent of the farming operations that year. That was the first year there was any farming tried there.

Q—How was it in 1879?

A—Well, in 1879 there was—Mr. Souther had left there then, and there was some parties—I cultivated or plowed some. I was stating that there was no other preparations made there. That same year, 1878, I plowed some for the Kern Valley Water Company, on Section 11, some 30 or 40 acres. I plowed it in 1878. I can't say whether I plowed it all in one month, or all
2075 in two months. I had my teams there. I can't tell exactly what month. I plowed it at different times. I think I put corn in it. I irrigated it.

Q—Did it do well?

A—No, sir; it didn't have water enough.

Q—1878?

A—In 1878. There was some farming in 1879 on Sec. 10. Mr. Crocker did it or had somebody do it. They put in alfalfa and barley. I could not tell how much, probably 50 or 75 acres. I think there was a portion to alfalfa that had been put there the year before, but I think the crop was a failure for the want of water.

2076 Q—If all the water that was put in your canal had been allowed to go down there, would it have been enough to have insured those crops? In 1878, if you had allowed all the water to go down there, would it have insured those crops?

A—There was plenty of water to start the crops, but it stopped too soon.

Q—If no water had been taken out in your canal in 1878, and it had been properly used below, would it have insured every crop that was put in there?

A—No, sir. I have only told about what farming was done on Section 10, in 1879. There was other farm-
2077 ing done there, 75 acres or more. A portion, I think on the east half of Section 10, and Section 3—no, not 10, down close to the line—must have been on Section 11, Section 2 and probably some on Section 3. There was about 75 acres plowed there, and I sowed some barley on Section 11. Others just plowed the ground and put in no crop. There was a little water come down, and I irrigated 15 or 20 acres and sowed some grain on that, and that all failed. Pratt and Estee were the other parties who did the farming in 1879, there in the country. In 1880 there was some farming done on Section 10. Mr. Crocker did it, or had it
2078 done.

It consisted of barley or wheat—barley though, I think, and alfalfa. I think there was 100 acres of it—may be more. They had a pretty fair crop in 1880. They happened to get water just enough to make a crop.

Q—How could they get water enough to make a crop in 1880, when you say that no matter if you had used all the water in 1878, there could not have been a crop made there?

A—Well, they were early in the season, and they had, I think, during the winter, the ground was then
2079 plowed and in good condition, and they had the water so that they could irrigate early, and then they sowed their crop and got a good start. And then afterwards, I think they got one irrigation, and that made the crop good. In 1880, I think the water came down until the 18th of July, and later than it did in 1878. I could not say whether more water came down in 1878 than in 1880. It failed sooner in 1878. I think at one period the water was higher in 1878 than in 1880, and generally the last irrigation was about the last of June or the 1st of July, and that is what saved

2080 their crops. In 1880 they took the same ground that had been prepared in 1878, and of course the ground was in a better condition. I think it would have been more successful and a surer crop under the same condition of affairs in 1880, than it would have been in 1878. I can't say that they would have made a good crop in 1878 had the ground been prepared earlier. I think the ground was more favorable in 1880 than it was in 1878, because it was in a better state of cultivation. I cannot say whether they would have had a good crop in 1878, with the water I had, if the ground had been prepared earlier. In 1878, if they had com-
2081 menced to have plowed it for a year or two previous, and irrigated it, of course it would have stood an equal show with 1880. I think they had about 100 acres in 1880. It might have been more or less. But I don't know anything about that. That is about all, except what I did myself. I had about 15 acres in section 11. I cut it for hay. It was a very light crop. Didn't have sufficient water. Including the whole swamp, I had about 15 acres on section 11. The reason I could not have as much water as Mr. Crocker had on his was, my crop was later than his or Mr. Norton's. The grain crop, I think, on these sandy lands, uplands, matured
2082 earlier than they would on those lands there. Down there they would mature according to the time they were sown. But I think the fall sowing would mature in June. In 1877, I think the tule crop was very light down there.

Q—Wasn't it a better crop for pasturage in 1877, than any year before or since?

A—No, sir; I don't think there was as much grass; I don't know. I can't speak positively about it, because I went there in the fall of 1876. That was the first knowledge that I had of that swamp.

2083 Q—Was there not a better crop so far as tules was concerned, for pasturage, in 1877, than any other year, to your knowledge?

A—There was not as much.

Q—Would it not feed more cattle and better, in 1877, than any other year that you have been there?

A—No, sir; it has been better, I suppose; I know there was considerable tules, and I say it was a better tule crop for the pasture of cattle in '80, than in 1877. As far as my knowledge extends, it was better in 1876, than in 1880. I went there in the fall of 1876. I think in '80 the tule crop was better for pasturage than in

2084 1878, and would feed more cattle, and would feed them better. I think 1880 was the best year I have known for pasturage there. I run the levels from Buena Vista Lake to Tulare Lake in 1877. I did the principal part of it. It was done under my instructions. A good portion of the time I used the instrument myself; had a level--had a regular instrument for surveying and levelling, such as is generally used, of the very best description. I ran the line myself, and what was not done by myself, was done under my immediate instructions. I done the principal part of it. I used the instrument. There were parties who run over my
2085 lines. I run over portions of this from Buena Vista Slough, Sec. 15, T. 30 S., R. 24 E., to the end of the Swamp Land District 121. That ends two miles north of the north line of the Township 28. My headquarters were on Sec. 15, T. 30 S., R. 24 E. I had 3 lines of levels run from my headquarters up to Buena Vista Lake, one by Mr. McCray, one by Mr. Joice, and one by Mr. Park. They all agreed within a very—I have not the notes of those levellings, nor of the levels run from Sec. 15 down to the end of the district. I made notes of it. I have them not—I never made--
2086 or saved my notes, because they were starting from the bench marks, and then my engineers—in the first place, there was a preliminary line run through. Mr. Park ran that. I didn't. Mr. Park, I understand, is in Arizona. I made notes of the work I did, just temporarily, on pieces of paper. I had a book--different books I kept for it. I have not that book now. Don't think I saved them, because I would probably work up a portion in one book, and when that portion was completed, I had my regular starting points, and worked from there on again, and then I would get the engineer to run over my work, and see that it was all properly connected.
2087 In testifying as to the difference in the elevation between the hadquarters and Buena Vista Lake, I took the figures of Mr. Park first. They were 9.98. I called it 10 feet. I knew where the bench mark was, at the Buena Vista gate.

Q—When you testified here, how did you get at the figures you gave me?

A—That is my recollection of it--and from those points.

Q—Then you spoke, when you gave the differences of level, on your direct examination, solely from your recollection of what you had done in 1877?

2088 A—Yes, sir. Now, it may possibly vary a little from that. But the canal from headquarters to the place where I left it, the bottom grade, to the best of my knowledge, was 37 feet; may be lacking a little one way or the other—37 feet fall. I run those lines through, and then after I had everything complete, or about completed, I had a gradesheet made, and that was—the result of that gradesheet, connecting all those different points, the headgate, the weirs, and the outlet, and the inlet, Mr. Joice worked that gradesheet out, it was turned over to the company; is not now in my possession. I suppose the Kern Valley Water
2089 Company has it. Mr. Livermore is Secretary. I cannot say whether he has that gradesheet. I last saw it in 1881, during the time I was figuring up something in connection with it. And I had fragments of portions of it; had them at headquarters, and turned them over to the company.

Q—And you spoke yesterday from your recollection of the figures marked on the gradesheet, and also others?

A—I have got the bench marks on the headgate, and I probably had the elevation of it in some of my books that I sometimes carry with me, and sometimes have
2090 in the office. I used some of those books to refresh my memory yesterday.

Q—And you have those books now, have you?

A—I can't say whether I have or not. I have got a book—that has a memorandum in it—that is, a detailed account of those different elevations. I last saw it in December last. I had the book then. I don't know what I did with it. Probably it is among some of my papers.

Q—From your head-quarters up to Buena Vista Lake, how did you get at the figures you gave of those
2091 elevations?

A—By recollection. They are thoroughly impressed on my mind?

Q—How did you get your information?

A—From the Surveyors.

Q—They told you?

A—I only know that from what they told me. I did not run the level.

Mr. Garber. I move to strike out the testimony of the witness as to all the levels south of his head-quarters; that is, between his head-quarters and Buena Vista Lake, as having been simply heresay.

2092 [The motion is granted.]

Q—Can you give me the length of the channel of that slough from your head-quarters, down to Tulare Lake, along the course of the slough. Can you give me any idea of the length of the channel, starting from your camp and going down to Tulare Lake?

A—Yes, sir. What time do you want the channel? Do you want it at the present date?

Q—Yes, I don't suppose it has changed any, has it?

A—Well, it is longer, I guess; than it was then. I guess it is. I suppose the lake has receded.

Q—The difference you know, about how much that
2093 was; it was about six miles, wasn't it?

A—Well, I don't know whether it was six miles. I have not been over the ground. I don't know whether it is 6 miles or 12 miles.

Q—Well, take it as it is now; could you give me the length?

A—I could give you something probably approximating to the length of the slough, and then it is just a natural impossibility for a man to give the length of the channel, as winding a channel as that is, for that distance. It is very crooked. In a straight line from my camp down to the lake, I think it is about 42 or 43
2094 miles. When you come to go right down to the lake, then there is a consideration enters into it there. For that line only continues until you reach what indicates the basin, or the rim of Tulare Lake.

Q—I mean where the water generally stands in the lake.

A—Generally? I have never seen it standing there. To the rim of the lake it is about 42 or 43 miles.

Q—Could you tell me about how much it would be along the course of the channel?

A—That is just almost an impossibility. Some
2095 places it would be double the distance, and sometimes it would not be double the distance. I could not answer the question.

Q—What is the difference of level between your head-quarters and Tulare Lake?

A—It is about 72½ feet. I don't mean the present rim of the lake, because I don't know anything about that; I mean, where there is indications of the water line on Tulare Lake. Now it may be 5 feet; it may be 10, or it may be 20 feet, down to the water there; to the actual water; I don't know where that is at the present day.

2096 Q—Where on the ground would be the outside of the banks of the slough, when the water is at its highest, from your camp down to Tulare Lake?

A—I suppose you could not see the banks of the slough?

Q—How wide would the water be at the highest?

A—I suppose the water has been from one side of the swamp land to the other.

Q—You have seen it that way, haven't you?

A—No, sir; I have not.

Q—Have you known it to be that way?

The COURT—If he has not seen it he cannot know it.

2097 Mr. GARBER—You haven't known it to be entirely over the swamp land?

A—No, sir; the cause of the break in my canal in 1878 was, I suppose, the water got through the banks in some way, probably through some badger or gopher hole, or something else. There was probably 5 or 6 feet of water in the canal then, or 7. I think I have seen the water 8 or 9 feet deep in that canal at headquarters at extreme high water.

Q—How deep would it be along the line of the canal then—about the same all the way?

2098 A—No, sir; I can't state exactly. In the canal there are some places where there is low places, where the water will flow outside of the excavations, on the west side.

Q—In some places it will not carry that much water?

A—It would carry all of the water.

Q—When there is a 9-foot head at headq-uarters, would it be 9 feet all the way through?

A—No.

Q—Why not?

2099 A—Well, it had more velocity in places. It is constructed on a broken grade. I say positively there is a place in that canal where it runs up hill on the bottom of the grade.

Q—Do you recollect, some time in 1878, going to Mr. Carr, or some of the agents of these ditches, and requesting him or them to open the ditches to let more water in, so as to save your canal?

A—I recollect something that was said about that. He advised me it would be a good place to turn the water down the Goose Lake Slough; I can't say just what remark it was; but I know I sent a team there, saying to Mr. Bitnell or some one that he could use

2100 so much of the water and turn it off, and all that; and I put a team there and I think he worked there or tried to work.

Q—Who are you speaking of now?

A—I put a man there; Mr. Carr, I think, is the man. I can't just say just what the conversation was, but I sent a team there with the intention of opening that channel, which had filled up, that is Goose Lake canal, but we made no success of it. I don't think any water passed out there to amount to anything; that was during the time we had a break.

Q—Do you recollect in 1878, before you had a break
2101 requesting the parties in charge of these canals to turn more water in their canals, so as to save the water from coming into your canal?

A—I think not. There might have been some see-sawing; something of that kind. I don't think there was any request made, I at one time made a request of Mr. Carr that they wanted more water down there, and that the parties wanted that water.

Q—Down where?

A—Down in the canal. And he told me they would not get a snout full.

Q—When was that?

2102 A—I don't know just what time it was. Somewhere along when we were talking about water. I can't fix the date, but I remember the expression.

Q—What year was that?

A—It might have been in 1878, some time. I could not say positively, but that is my recollection. I think more than likely it was in 1878. I could not just say just where Mr. Carr was on that occasion.

Q—Can you tell me what time of the year?

A—Well, it was the time—I think the question that called this expression was in regards to having more
2103 water down there. I can't tell what time of the year that was. It was some time in 1878, I think. That is as near as I can come to it.

Q—Where did you meet Mr. Carr on that occasion?

A—On that occasion I could not say exactly where.

Q—Where did this conversation occur?

A—I can't say where it occurred; probably it occurred here in town, if recollect rightly. The only particular part I recollect about that was the snout full. There was other talk. We were talking about the water generally. I don't know what it was. We were talking about water, and getting water down there, and

2104 I think there was some talk in regard to the parties wanting water down there, but I can't say positively just what it was. If the other remarks had been as pointed as that was, I would have remembered them. That is all I recollect about that. I cannot tell you what time in the year 1878 it was.

Q—Was there any time in the year 1878 that you requested the parties in charge of any of these ditches to take more water into their ditches so as to prevent the water from going into your canal?

A—I don't think I ever made a request. I think, though that there has been sometime or other a conver-
2105 sation in regard to that, that they could help me out a great deal; and I think there was, if I ain't mistaken—rather, Mr. Carr made the remark that sometimes he would close his gates and he would raise hell with them, I think, or something of that kind. Don't know when that conversation occurred; but it has occurred.

Q—Tell me all you recollect about that conversation at present.

A—I think Mr. Carr and I were just having a little social talk; don't know why exactly. We frequently sat down and talked.

Q—What took place, as near as you can recollect?

2106 A—I think some talk regarding the water suits, or something of that kind anyhow, in regard to water. Cannot say whether it was before or since this suit was commenced, May 12th, 1879. I have told you all that I recollect about it. Those points impressed themselves upon me, because we wanted water there. What was said, as near as I recollect, was such as you would generally talk about water. You have got the substance of it.

Q—You have told me the substance of what was said on the other occasion?

2107 A—That was about closing the gates and sending the water down. He didn't say he would close the gates and ruin them. He said he would raise hell with them. It didn't amount to anything. I didn't think anything particular about it. I don't recollect any other conversation with any other parties in control of these ditches in the spring of 1878, about their taking more water into their canals anything more than the talk I told you about Goose Lake; nothing more than I have said.

Q—You spoke of throwing a chip or something into Buena Vista Slough to see which way the current ran. Who was present with you at that time?

2108 A—I don't know as anybody was. I don't think it was a chip; if I recollect right it was a piece of board or something.

Q—Was Mr. Pottinger with you?

A—I don't think he was. I may have done that more than once; but it soon got so evident that it was not necessary. I think I made that experiment more than once. I know that while the men were at work there the dust would blow across the surface of the water, and that dust would invariably float north. I remember one evening Mr. Pottinger going there with me, but whether I made any experiments at that time I
2109 can't say. I think it was in 1876—in the fall of 1876. I think that was in the fall of 1876.

RE-DIRECT EXAMINATION.

By MR. HOUGHTON. The places that I refer to in Kern River, where it is 700 feet wide, is right in front of Belleview Ranch, above the Pioneer Canal, in Section 31.

Q—How much of that 700 feet will be covered with water during extreme high water, or when the snows are melting in spring?

2110 A—It would all be covered. I have seen more than that covered. I have seen it outside of that and overflowing the banks at that point. After the spring floods are over, I have seen it so that it would just run in a little low channel, probably not more than 50 or 100 feet wide.

Q—Are there any other places in Kern River that are as wide, where the high water channel is as wide as at that point?

A—Well, I think this place I referred to is almost clear. That is there are no islands, and probably there may be a little right next to shore—something of that
2111 kind. And then there is places in the river where it is very wide. I would say probably there is an island or such a matter in it that would probably make—

Q—I wish, Mr. Wible, you would answer the question. Is there any other place in Kern River below the railroad bridge where the river is wide, as at the point you have mentioned; that is, 700 feet wide?

A—Yes, sir. I don't know how many just such points, but I think there are 2 or 3 such points. At the widest point between the Railroad Bridge and where it runs into Buena Vista Slough, along about Section 32, Township 29 South, Range 27 East, where there are

2112 some small islands, and the water runs through them, and on each side of them, I should judge that excluding the islands, the width of the river from bank to bank—of the channel or channels through which the water runs—taking all the channels or channels through which the water runs, and the bed of the river, is probably 1,000 feet. The narrowest place in the river, between the railroad bridge and Buena Vista Slough is, I think, at Tracy's Crossing, where the width from bank to bank is probably 200 feet.

Q—Does the Kern River, during high water, or a spring flood, overflow its banks at any points between
2113 the railroad bridge and Buena Vista Slough?

A—Yes, sir.

Q—At about how many points?

A—I have seen water running over the banks all along on Sec. 33, and running over into Goose Lake Slough. There is a place on Sec. 2 where I have seen the water over that I didn't include as within the banks. But still there is higher ground back of that.

Q—You state in your cross-examination that at different periods you have seen water running by what you call the Pioneer Bridge but that it did not reach head-quarters. I will ask you what body of water is
2114 necessary to have run past the county or Pioneer bridge to have it reach head-quarters?

A—I think 50 cubic feet would run through there in 24 hours. It depends on what time of the year it was. I know the Calloway Canal.

Q—When did you see the Calloway Canal last?

A—I cannot give the exact date; but I have seen it since this suit was commenced—the trial.

Q—Would the head of water in the Calloway Canal, if there was no water running in the river at all, would the head of water in the Calloway Canal reach head-
2115 quarters?

[Question objected to by defendants as calling for the mere opinion of the witness. And further, that it relates to a time subsequent to the commencement of the suit].

[Objection overruled, and defendant excepts].

A—Yes, sir.

Q—You have testified that you saw the water running in the Calloway Canal on the 13th day of March, 1881. Would the water which was then running into the Calloway Canal, if turned into the river at the canal, have gone through and reached head-quarters,

2116 on Buena Vista Slough, had the river been dry, and no other water in it?

[Question objected to by defendant, on the ground that it calls merely for the opinion of the witness. And further, that it relates to a time subsequent to the commencement of the suit].

[Objection overruled and defendant excepts].

A—Yes, sir; it might if it was let alone—if it had had free flow.

Q—Was there any water running into the Calloway Canal on the 9th or 10th of January, the day you have testified that these photographs were taken?

2117 A—No, sir.

Q—When you were on the wing-dam of the Calloway Canal, on the 13th of March, 1881, which you have testified to, and when the dam had been thrown across and a portion of it had washed away, what proportion of the water was running into the Calloway headgate, and what proportion down the river?

A—The gap was 5 or 6 feet wide; but I could not tell just how deep it was, but I could see a sandbar just below; it might have been 5 or 6 feet deep in that gap, maybe as deep as it was wide, or maybe deeper; and the water was running swifter than it was in the

2118 main channel, and probably one-fifth of the water would run through there.

Q—One-fifth would run down the river?

A—Yes, sir. The brush that I speak of as having been put in the head of the canals to make wing dams is generally put in in the decline of the water, and some of it remains there until the freshet of another year comes, or it is taken out in some other manner. These wing dams are usually left in the river. When I spoke of high water channels along Buena Vista Slough to Mr. Garber, I meant those

2119 little side channels that ran out from the main channel, not the main channel. The bottom of the bed of these side channels is higher than the main channel. The Goose Lake Canal was constructed, the largest of these, I spoke of as taking water from Kern River. It is now closed up, and not running. The Calloway is taking the most water. I have been farming many years. I know the quality of that land down along Buena Vista Slough. Made special examination of that soil such as I would make if making a selection for farming. The quality of that soil is good.

2120 Q—Isn't there a good deal of alkali in that soil?

A—No, sir. If there is, it is only perceptible in a few particular spots; more than two-thirds of that is good land. I should say that not one-third of it is unfit for farming purposes on account of alkali. I have been across it and all over this district, and am familiar with all of that land, and don't think there is one-fourth of that land that is not good land.

Q—Have you made any such special examination of the greater part of it that you can tell whether there
2121 was so much alkali in it as to render it unfit for farming purposes?

A—I have seen some that had no indications of alkali, but never saw any yet what produced when it had a chance. I can tell by simply looking at that land without making any close examination of it whether it contains so much alkali as to be unfit for cultivation.

Q—Just by walking over it and looking at it?

A—Yes, sir; if I think it is necessary.

Q—What do you mean when you say 50 cubic feet of water?

2122 A—I mean 50 cubic feet of water running in a channel, or as it would run in the channel of Kern River.

Q—How do you ascertain the amount?

A—If it was 100 feet wide and 6 inches deep, or if it was 50 feet wide and 1 foot deep, that is, 50 cubic feet, as I used the term.

Q—What is 50 feet of water, as you use the term?

A—Fifty cubic feet of water running down, spread over 100 feet of ground, or, say, spread over 50 feet of ground. I mean, 50 cubic feet of water flowing just as it would flow in Kern River.

Q—How did you measure and calculate how to
2123 find out what constitutes 50 cubic feet of water?

A—If I was going to measure it to ascertain properly to get just 50 cubic feet, I would cross-section it and ascertain it in that manner.

Q—How?

A—I would set my grade stakes on the outside, get my elevation and strike my line across.

Q—Wouldn't you first get the number of square feet in the cross section of the stream?

A—I am telling you how I would get it, I say, take the number of square feet in the cross section.

2124 Q—Suppose you had 50 square feet in the cross section?

A—Well, I would get three of those cross sections.

Q—What for?—what do you want with three?

A—I would determine the velocity in that way.

Q—After you got the velocity, what then?

A—Then, if there was 50 cubic feet flowing—

Q—What I want to get at is, what constitutes 50 cubic feet of water. After you get your cross section, how do you go then to calculate and estimate the amount of water? On what principle do you estimate the amount of water?

2125 A—Well, I get my channel sufficiently large to hold 50 feet of water.

Q—Well, what sized channel will hold 50 feet of water?

A—If I simply make it in a gauge constructed for that purpose, I would construct it 50 feet wide and a foot deep.

Q—Well, if you had a channel 50 feet wide and one foot deep, would you say that would pass 50 cubic feet of water?

A—Yes, sir.

Q—Without regard to the velocity?

2126 A—There was nothing said about velocity, but I think there is enough on any channel you could construct on the same grade that Kern River is running at the point I mentioned that 50 feet would reach, if constructed on that grade, that that is sufficient water to reach head-quarters.

Q—Then, I understand when you say 50 cubic feet of water, you mean a volume of water containing 50 square feet, running with the velocity that it runs anywhere in Kern River?

A—No; at that point at the Pioneer Bridge.

2127 Q—What is the velocity that you assume it to run there?

A—A small head of water like that would not run more than two miles an hour.

Q—Then I understand you, a cross section of 50 square feet of water, running in the channel 2 miles an hour, is what you mean by 50 cubic feet of water?

A—Yes, sir.

Q—You say that if such a channel, if such a head of water as that was started at the head of the Calloway ditch, and the river below that was entirely dry, that it would reach your head-quarters?

2128 A—I did not say that.

Q—Would it, or would it not?

A—I don't know whether it would. That is about or near one-third the distance further.

Q—How much at that point. How much water would it take if the river was entirely dry, to reach your head-quarters?

A—I could not say positively, but I think 50 feet of water, from there would reach.

Q—How much of 50 feet of water would reach your head-quarters?

A—It might be pretty small. It probably would be
2129 very small at first. It would probably increase.

Q—If it had plenty of time to get down, so there was a regular flow, and the amount of water was kept up continuously, how much would there be when it got down to your head-quarters?

A—If the stream was kept running steadily, it might lose a half or little more—a small stream depending upon the time of the year.

Q—Do you say that if you were to turn 50 cubic feet loose at the Pioneer Bridge, that 25 cubic feet of that would reach your head-quarters, if there was no water in the river?

2130 A—Yes, sir, I think it would. You would have to give it time. It would not reach there much in 24 hours. I think it would probably reach there in 24 hours.

Q—And the next day 25 feet would be running there at head-quarters.

A—It would take may be, 3 or 4 days might have to run a week or ten days to get its proper head.

Q—Would one drop of that head of water reach your head-quarters, if it was turned in at the Calloway or Pioneer Ditch?

A—Yes, sir.

2131 Q—Wouldn't every drop of it run into Buena Vista Lake?

A—No, sir; I don't think it would; that is taking a contingency there that——

Q—When there is no water in the river or in the lake wouldn't it, every drop of it, run into Buena Vista Lake?

A—According to the theory that the water at the present time divides there.

Q—The way the water is running now, and the way the channel is now, take every drop of water out of the

2132 lake, river and slough, and put that head of water in, wouldn't every drop of it go into Buena Vista Lake?

A—I don't know as it would.

Q—Don't you think it would?

A—No, sir; I don't think it would; it might divide there and cut it off, or ——.

Q—How much would get to Head-quarters?

A—You would reduce it more than one-half according to the theory, provided that gate on Buena Vista Slough was closed.

Q—No, leave that outlet open. Take the channel perfectly dry, and the lake dry, and the water and
2133 channel as it is today.

A—I think that more than likely it might cut the water off so that it would not get to Head-quarters.

Q—Not a drop of it?

A—Yes, sir; it might. That gate, if I wanted to run water down, is for the purpose of regulating the water. I cannot say exactly when I last opened the gate so as to let the water run into Buena Vista Lake, at the Cole Crossing. It was in—I think that the first water that passed through there—the last time that I opened the gate. I cannot just give the date, but I can give the circumstances exactly, as the gate was
2134 opened and as it is now. I opened the gate, or took out the gate, some time in January, 1881, and then I had an embankment in front of the boards—in front of the head-gate—and then the high waters broke that embankment, it appears to me, some time in February. It has been open ever since that occurred. I opened that dam for the reason that I wanted to let some water through—in case of high water I wanted to turn some water in there, in order to regulate the water, to take some in there; if I had more than I could control, or more than I wanted below, I would turn it in there. It was for fear there would be too much coming down
2135 on me—for fear there would be a freshet, or something of that kind.

S. M. Farman,

Being called as a witness for plaintiffs and sworn, testified as follows:

To Mr. Houghton—I reside on Kern Island, on the southwest corner of Section 2, Township 30, Range 26, right on New River. I went there in 1872.

Q—What was the condition of that river when you went there?

2136 A—Well, it was full every summer, from bank to bank. In 1872 the river was full, most of the season. I don't think there was any portion of 1872 that the water was not running by my house.

Q—How was it in 1873?

A—Well, there was one dry year—but I don't remember which it was—between 1873 and 1876, the water just run. That year the water was so you could take a running jump over the water.

Q—How was it in the other years, between 1872 and 1876?

A—It was fordable after the high water.

2137 Q—Was it running during those years?

A—Yes, except the dry year, when it was quite dry. I think it went dry in 1877. There was more water in 1878, I think, than there was there in 1877. There was a portion of the year 1878 that there was no water running by my house. I left there in April, 1879, and was gone until January, 1880. Before I went away it was dry, except water holes in sink holes; no water running. That was the 1st of April, 1879. When I left, in April, no water had come down that year previous to that time in 1879. I returned in January, 1880. The river was
2138 then dry, when I got back to my place. It came down, I believe, after the snow water ran, until along in May, I think. After it started to run in 1880, it ran a short time, during the highest water. This year, 1881, it was dry—this last year; didn't run there for, I think, two months in the summer. There is water running by my house now. I think it first came down in November, and has been running by my house ever since then.

Q—What has been the effect, if you know of the failure of water to run down the river and by your house, upon the lands in that vicinity?

A—Well, it has made some land for me and some for
2139 Mr. Parrish, I believe.

Q—How has it made the land for you?

A—The young willows and cottonwoods grow there, and when the water is high there is a sediment stops there and forms a soil.

Q—Then, what is the effect of a dry year, or the failure of water to run by there, upon that? You say the willows grow up?

A—Yes, sir; they have grown up on some of my own and some on Mr. Parrish's, on the same quarter. They grow up in the Old River bed.

2140 Q—How far out have those willows grown in the bed?

A—Well, it is about half way across in the channel.

Q—How large have those willows grown?

A—Well; they are ten or twelve feet high. They are mostly cottonwoods on my place. I don't know as I have seen another place that it has made land like it has there, on my place and George Parrish's, on the same quarter.

Q—You say one-half of the channel has grown up?

A—Yes, sir; half of the distance across the river the channel has grown up, as near as I can get at it.

Q—What is the effect of that upon the river when it
2141 is full and the snows are melting?

A—Well, it breaks round a little, but it has not washed that timber out; it breaks around in back of it sometimes, but it has not washed any timber out; it is too strong.

Q—Does it cause the river to overflow the banks?

A—They never have overflowed since this thing has been there.

Q—Well, why hasn't it?

A—Well, there has not been water enough, I suppose.

Q—Then you have not had any extreme high water since then?

2142 A—No, sir; not since the willows began to grow, in 1877. Several years ago we had high water, so that the banks were full from bank to bank, and just a sand bar all the way.

Q—Was the river bank full, as you say, during the years 1873, '4, '5 and '6?

A—Yes, sir; it was swimming there all of the time, pretty near.

Q—If that same body of water could come down now, what would be the effect of those willows upon it?

A—Well, it would have to take through the north or the south bank or the main land. It would overflow the
2143 banks. The banks are very low on the north side and south side on my land. The old bank is not more than two feet high; two or three feet high.

Q—Were you ever on Buena Vista Slough where the Kern River empties its water into it?

A—I worked on that levee, sir, in 1876.

Q—Do you know where the water at that time ran into Buena Vista Slough?

A—Well, I think there was one channel ran, about fifty yards from what we call the bridge, and the other two channels—I never was at the mouth of them; they

2144 are down near Dixon's ranch. I never was at the mouth of the other two channels. I think I went to work on that levee the 1st of November, 1876

Q—In what direction did the water run that was running through that channel that you speak of—the south channel—during the time you were employed there?

A—That ran into Buena Vista Slough.

Q—Which way running?

A—Well, where it runs there, it runs about due west.

Q—It ran towards Tulare Lake?

A—Yes, sir. What I call the first channel comes right up to the levee, what I call the levee, there. I worked
2145 on the levee there. It comes up there, and then turns a little north course, and then runs into the slough. In high water it runs north. While I was there the water did run north. This is a small channel; it is not over a third of the river. I should not think it was a third. I have been at the point where the river divides into those three channels; been through there several times. I have not been there since 1876. I don't know what the condition of it is now. We crossed there going to what is called "Headquarters."

Q—What channels was the water then running in?

2146 Mr. Garber—In November, 1876?

A—Well, it is November or December. I was there in January; but I could not tell you exactly what time it was now. What was your question?

Mr. Houghton. Q—In what channels was the water then running?

A—Well, it kept the Buena Vista channel after the Kern River got in the channel. I crossed those three channels at a point on Kern River, this side of Buena Vista channel, where the river separates into three channels. I saw the water running in all three of these channels.

2147 Cross-examination of

S. M. Farman.

Mr. Haggin. Q—You say that if the water was high in Buena Vista Slough, when the waters of that south channel reached that slough, that they would run north. Suppose the waters were low, which way would they run?

A—Well, I suppose they would run the other way; to the south.

2143 Q—The waters were high when you were there?

A—Well, there was 12 to 14 feet in that channel. I helped measure it there, by the bridge. I live on the southwest quarter of Section 2. I do not farm much now. I am living there. I had a little alfalfa in; but I was at work outside most of the time. There is farming going on there. What I do on my place myself; I raised a little alfalfa, that is all, and a little barley, and I irrigated it. I got the water from a ditch of my own, that comes out above the bridge, what is known as the Parrish and Wilson ditch. There is another ditch, also,
2149 across the river, I believe. I don't know the real name of it, but they call it the Pensinger ditch. And there is another one, called the James and Dixon. I think they are right together.

By Mr. HAGGIN. Q—How do they get the water into those ditches?

A—Well, they most always wing-dam them there, and turn all the water that comes down there. They had it clear across the river several times.

Q—Is that the place where you said these willows grow up?

A—No, sir; it is just above there. They never backed
2150 the water to my house. The willows grow a little above my house, on the same quarter section where the thicket is, there is a kind of thicket there, and these willows are growing on a sand bar. The bar was not there when I first went there. The bar has changed. Sometimes one side of the river is higher and sometimes the other. When it is running sand it changes every year. It has been changing every year until this timber got there, and that stopped it. It has not cut any more since that time on that bar. That made the channel more defined; it kept the channel on the north side of the stream.

2151 Q—You spoke of a year between 1872 and 1876, in which the water did not run down there, or very little. What year was that, do you know?

A—I didn't say it didn't run; I said it didn't run so much. I couldn't say what year; it was between 1872 and 1876. I suppose it remained in that condition, running very little, for two or three months. The water got warm, I know, and I had to dig a well in the sand, in the channel of the river, on a sand-bar. It got too warm to use.

2152 WM. B. CARR,

Being called as a witness for plaintiffs and sworn, testified as follows:

By Mr. HOUGHTON. Q.—Mr. Carr are you one of the directors of the defendant, the Kern River Land and Canal Company?

A—I think not.

Q—Don't you know whether you are or not?

A—Oh! I think I am. I am, yes. That is the canal down at the—

2153 Q—I mean the Kern River Canal and Land Company, —the defendant—the Calloway.

A—Yes, sir.

Q—Who are the other directors of that company?

A—No. I don't think I am a director in that company. I ain't certain. But I don't think I am.

Q—Do you know who the directors of that company are?

A—Well, I can't say who was elected last year.

Q—Who is the President of that company?

A—I ain't positive. I think it is Mr. E. A. Davis, but I wouldn't say positively. I think Mr. Goodrich is Sec-
2154 retary of that company. I could not tell you his first name.

Q—Do you know, Mr. Carr, who has been acting as Superintendent of this company here during the last year?

A—I don't know that there is any Superintendent. No, I don't know who has been acting as Superintendent. I have known the Calloway Canal since 1875.

Q—When did the defendant first take water through that canal; in what year?

A—I think there was water in the canal in 1876.

Q—How far was it taken that year?

2155 A—I think it ran down—I wouldn't be positive as to that, bnt I think that in 1876, it went down to the Section known as the Bennett Section. I think that was about four miles from the head of the canal. I think that the Bennett Section is 29. ain't certain, in Township 29, Range 27. That is about four miles from the head of the canal. The head of the canal, which I think is on Section 13 in the same Township and Range.

Q—How far had that canal been constructed on the 1st of January. 1876?

A—Well, probably, it was out—my recollection is—I

2156 wouldn't be positive about that, but I suppose it was out eight or nine miles. My recollection is it was out to Section 19. I think it had reached the point where the canal passes through Section 20, in Township 29, Range 27; I wouldn't say positively.

Q—What time in 1876, was the first water taken into that canal?

A—Well, I could not say that. I have no recollection about it. It may have been when the water was very high, in 1876.

Q—Well, when would that be?

A—I don't recollect now. I suppose along in Febru-
2157 ary or March. I don't recollect now. I suppose the high water was along in the Spring of 1876.

Q—How far had the canal been constructed on the first day of January, 1877?

A—Well, there was a pretty good force on the canal at that time, Along in 1876, there was a great deal of work done. I don't recollect. I was backwards and forwards there; had quite a large force on. I could not say how far it had been construced the 1st of January, 1877. It must have been out to the seventh standard line or beyond; that is my recollection.

2158 Q—That would be three miles or more, further than it was; an extension of three miles?

A—Yes; I think it was beyond there, I wouldn't say where in January, 1877.

Q—How many miles were built during 1877? Up to the 1st of January, 1878?

A—It must have been built out to the line dividing Townships 26 and 27. The Township line between 26 and 27. I think, probably, that it was not that far in 1877. I would not say whether it was 3 miles or 6 miles. I could not say.

Q—In 1878, how far was it extended?

2159 A—Well, probably twice as much.

Q—What point did it reach in January, 1879?

A—Well, it is a thing that I have not thought of at all, and to tell the distance. I wouldn't be accurate about it.

Q—Well, give us your best recollection. To what point did it reach on the 1st of January, 1879?

A—Well, some place along in Township 27, Range 25. I wouldn't say where. I suppose it had gone half way through the Township. In 1879 I think it ran through to Poso Creek.

2160 Q—Wasn't there any built in 1880?

A—There was a great many ditches; there was large ditches taken out which were part of the Calloway ditch.

Q—Well, the main ditch you will confine yourself to now. Was there any of the main ditch constructed in 1880?

A—I think there was, probably. I don't think there was more than two or three miles. I don't think the main ditch has been extended in length this year, but there has been work done on the main ditch this year.

Q—In extending it?

2161 A—No; not in length. When we first commenced work on the main ditch, we would strike hard pan, and it was impossible to get it done until we softened it; and when we softened it up, we would go back and take the hard pan out. We were enlarging the ditch in 1881, deepening it, at the places where we struck this hard pan and could not get it down. I could not say how much depth we added to the canal at other places, because I was never there personally.

Q—How much side ditch did you have leading out of that canal in the year 1876?

2162 A—In 1876, I don't think we had any. In 1877, I would not say positively as to that. I think we made some side ditches in 1877, but I ain't certain.

Q—In 1878, how much did you make?

A—Well, probably we had eight or ten miles.

Q—How much in 1879 did you add to that eight or ten miles?

A—Well, from 1878 we increased our ditches all of the time; done a great deal of ditching. I mean the main ditches—the main ditches from the main trunk. Those were side ditches to the main canal.

2163 Q—Well, in 1879, how much did you add to those main side ditches?

A—Probably ten or fifteen miles.

Q—How much did you add in 1880?

A—Probably as much more.

Q—How much have you added this year?

A—Probably as much more; no, not quite so much this year—half.

Q—Ten miles?

A—No; probably four or five miles.

Q—Mr. Carr, when did you first become interested in the Calloway ditch?

2164 A—I think it was in the fall of 1875. It may have been the 1st of January, 1876? I became interested by purchase.

Q—What time did Calloway and his associates convey that property to the defendant; what year?

A—I think it—I don't know that there was a deed. I ain't certain.

Q—Did the Kern River Company—didn't they get a deed from Calloway?

A—I presume they did. We took charge of it in December, 1875, or the 1st of January, 1876. The per-
2165 sonal property was turned over at that time, and we took charge of it.

Q—Who has controlled and managed that canal since that time?

A—There have been several parties.

Q—Don't Mr. J. B. Haggin and yourself have control of that corporation, and haven't you had management and control of it ever since its organization?

Defendant objects to the question, on the ground that it is incompetent. Objection overruled and defendant excepts.

A—I suppose we controlled it.

2166 Q—And have you during all that time?

A—Yes, sir.

Q—Mr. Carr, was the construction of the wing-dam, at the head of the Calloway ditch, made under your instructions or Mr. Haggin's?

Defendants objected to the question, on the ground that it was after the time when the suit was brought.

Objection overruled. Defendant excepts.

A—I don't know whether I instructed them just what to do, but I instructed them to put some waler in the Calloway Canal. I don't know that I told them how much to put in. I didn't tell them how far to extend that
2167 wing-dam. I don't think I have seen the wing-dam, to know how far it is constructed. I couldn't say what year this wing dam was first put at the head of that canal to throw water into the canal from Kern River.

Mr. GARBER—All this comes in under the same objection and ruling.

Mr. MCALLISTER—Certainly.

Q—Was there ever any water running into that canal, or thrown in there by that wing-dam?

A—I think there has been.

Q—When? What year?

2168 A—Whenever it was high water. I couln't say that there was a wing-dam constructed there in 1877, to throw water into the Calloway. I think there was in 1878.

Q—Was that done under your instruction or directions?

A—When I went up there, either in 1878 or 1879—1878, I guess it was—I saw them putting up a wing-dam. I think it probably went a third of the way across the river. I don't believe I was a director of the Company then. I wouldn't say positively, but I don't think I ever was.

2169 Q—In 1879, was there a wing-dam built there?

A—I dont know; I wouldn't say; I don't hardly think there was in 1879; there might have been for a little while. I think there was one there in 1880.

Q—Did you give any instructions in connection with the construction of that dam?

A—I don't recollect of but once being there—that is, of discussing about the wing-dam—one year, and I think that was in 1878. I don't think I have been on the wing-dam this year. I suppose there has been one built there, but I don't think I have seen it this year. I didn't instruct anyone this year to build a wing dam to throw
2170 all the water of Kern River into that canal. I don't know as a fact, that that has been done. I don't know as a fact, that there has been a wing-dam clear across Kern River. throwing all the water into that canal at any time this year.

F. M. Epperly,

Being called as a witness for plaintiffs and sworn, testified as follows:

To Mr. Houghton.—I reside down here on Buena Vista Slough. I came on to the Slough in 1871. If I remember right, it was in May, 1871. I then came to a point
2171 about fifteen miles below Mr. Wible's head-quarters canal camp, known as the Dover Camp at the present time. It goes by and always went by the name of Dover's Hog Camp.

Q—Do you know what section that is on?

A—I think it is on Section 1; I don't know positively. I went there in May, 1871. I remained there until May, 1876. I was living there all that time and raising hogs.

Q—Where were you running the hogs during that time?

A—I was running them in on the tule land there, on

2172 Buena Vista Slough, between the lower end of Weed Island—well, it was running down about nine miles of front there, that my hogs ran on, nine miles north from Weed Island. I don't know that I can tell you exactly where the lower end of Weed Island will come on the map, but it is about two miles below the Bonestell house.

Q—There is a point marked on the map as "Button Willow." How far is it from that point?

A—Button Willow is just below the lower end of Weed Island. From the Island it must be—it is not exactly opposite the lower end of the island, but from the Bonestell house, it is about a mile and a half, that is, Button
2173 Willows is. That Button Willow tree, is about opposite the lower end of Weed Island, and I was working my hogs from that point down this way about eight miles. The Button Willow is a shrub, a willow that grows there, just a clump of bushes.

Q—When you went there in 1871, what was the condition of the water?

A—Well, the sloughs were all full of water when I went there in 1871. I don't recollect just how long it ran there, but I think until August. Then it stopped running down where I was. I don't know how long it
2174 ran still above where I was, but down in the portion I was in it stopped running. In 1872, there was plenty of water there, running, if I recollect right, the whole season, the whole year round.

Q—How was it in 1873?

A—Still running there in 1873.

Q—How was it during the year 1874?

A—Well, if I recollect right, the water stopped running a short time in 1874 at the point where I was. In 1875, there was plenty of water running there.

Q—How was it in 1876?

A—When I lived there in 1876, there was plenty of
2175 water running there. I left there in May, 1876.

Q—While you were at Dover's Camp, between 1871 and 1876, were you crossing the sloughs between the two points you have mentioned?

A—Yes, sir.

Q—Often?

A—Yes, sir; crossed there often.

Q—How often?

A—Well, that I could not enumerate very well, because I was working all the time in those tules there looking after my hogs, and the number of times I crossed I could

2176 not tell you. I was working along there on that swamp land between those two points, and working over about nine miles, all of it. When I left there in 1876, I went to Gilroy. I returned in 1877 back on to this swamp. I came there in August, the first days of August. I came there and went to work with Mr. Crocker tending stock pumps. My camp was on the slough about three miles above the Dover place, at a pump there is there. I remained there abont four months, helping putting in pumps and furnishing feed to the pump camps.

Q—How many pumps had Miller, Lux & Crocker?

A—If I remember right, there was twelve pumps running.
2177 They were all of them double pumps with the exception of two. There was two pumps right close together, run with one horse power. All these pumps were running by horse power that year, none of them ran by hand. One pump would water, I suppose, fifteen hundred head of cattle, that is, a double pump. I was there four months.

Q—What was the condition of the slough—the water in the slough—during those months?

A—At the time I came there the slough was dry, and remained dry as long as I stayed there.

2178 The COURT—I think the Court has had sufficient evidence as regards the condition of that slough during 1877, in through there, there having been a number of witnesses called upon it.

By Mr. HOUGHTON. Q—Were you at that time doing anything in connection with the swamp land there? Were you going through it at all?

A—Yes, sir; I was traveling through it more or less every day. I was traveling from Weed Island to six miles below, to Dover's Camp, traveling over a space of about nine miles there, in that country. That is a portion
2179 of the same nine miles that I have spoken of before.

Q—Was there any loss of cattle while you were there?

A—Yes, sir; the loss of cattle was very heavy while I was there. That was in 1877.

Q—What was the cause of their death?

A—Well, mostly the cause of their death was the scarcity of water.

Q—How was it as to feed?

A—If there had been plenty of water, there was feed enough there, I think, to carry the cattle; but water was scarce.

2180 By Mr. GARBER. Q—Did you say there was plenty of feed ?

A—No, sir; I didn't say there was plenty of feed, but feed enough to carry the cattle.

By Mr. HOUGHTON. Q—What time did you leave there ?

A—I left some time about the last of November. I was not there after that. Then I came back there again in 1879; I don't recollect exactly what month, but it was late in the fall. I located then down on the swamp, near the Tule House. It was six miles from my camp to the Tule House. The Tule House was nearly north of where
2181 I was located. I don't know what section it was on; I don't know nothing about the sections at all. I was located on the west channel, on the west side of it. I was right on the shore of the channel, right along on the shore, not but a short distance from the channel. I was eight miles from the adobe holes, northwest—a little west of north. I don't know that the place where I lived has any particular name. There is nothing there but a house and a corral. The corral remains there yet, but the house is moved away. I was raising hogs there. I remained there until the last days of April, 1880.

2182 Q—And what time in 1879 did you say you went there ?

A—I went there some time in the fall. Let me see, I may be mistaken. I wouldn't be positive what time it was. I may be mistaken. I will correct myself. I went there in 1878. I made a mistake there. It was in 1878 that I went there, in the fall; the fall of 1878. It may have been in October or November.

Q—What was the condition of the water in the slough there when you went there in October ?

A—There was no running water there at all when I went there

2183 Q—What was the condition of the water in Buena Vista Slough at that point during the year 1880?

A—There wasn't none at all from the time—the water never came down there; no water came down there from the time I went there up to the time I left. There was no running water there at my camp at that time.

Q—While you were at that point, between what points were you working your hogs?

A—I was working from the Adobe Holes down to the Tule House. I was on both sides of the swamp, and all through in different directions.

2184 Q—How often would you cross the swamp land during the time you were there on those sloughs?

A—Well, a number of times. Most every day I was riding across those lands. I spent my time in looking after my hogs in that swamp, all the time in the slough there.

Q—When you left that camp, where did you then go?

A—I then went up to this Dover Camp, back to the Dover Camp again. That was in April, 1880.

Q—What were you doing at that point when you went back there?

2185 A—I was still working them hogs, raising hogs. I remained there from April, 1880, up to the present time, and have been working there ever since.

Q—Between what points have you been working your hogs since you went to the Dover Camp?

A—Well, from about the lower end of Weed Island, about nine miles down in that swamp there, on about the same range; the hogs went in on about the same range.

Q—Have you ever been on Buena Vista Slough, south of the north end of Weed Island, that is, between the north end of Weed Island and Buena Vista Lake?

A—Yes, sir. I have been there a number of times.

2186 Q—How many times?

A—Well, that I could not tell you. I could not tell you how many times I have been there. That is something I could not answer, because it is hard for a man to recollect the number of times, traveling around there the way I was. I suppose I have been there fifty times, may be more. I have been to Tracy's crossing. I was along the slough there in 1872, hunting elk. I was on the slough at different points, traveling all up and down the slough. I was traveling up and down the slough on the west side of it, nearly the whole length of it there, between those points.

2187 Q—What was the condition of the water in there then?

A—It was a good head of water in there at the time I was in there.

Q—Was it confined to the channel or overflowing the channel?

A—It was confined to the channel in most places. In some places—few places, it was running out. It must have been in June or July, 1872, along about that time; I don't know exactly.

Q—What was the condition of the slough at that time

2188 between Tracy's crossing and the Bonestell House?

A—Well, there was a channel, a perfect channel from the Bonestell House, below the Bonestell House, up to where you come to what is known as the drift, and there the water spread out some from the formation of this drift, made two or three different channels, and they all came back into the same one, with the exception of one that made out on the west side—that followed down on the west side of the swamp.

Q—What was the condition of the channel above the drift?

A—There was a well defined channel from there on
2189 out.

Q—How wide was that channel at that time?

A—Well, that channel must have been—well, it was different widths; some places sixty to one hundred and twenty five feet, may be one hundred and fifty.

Q.—Do you know how deep the water was in that channel?

A—No, sir, I do not. The water was running in it, running north. I have never seen that channel when there wa sno water in it. I have seen that channel when there was no water running in it.

2190 Q—How deep was that channel?

A—Well, I think that that channel must be—I think it would average seven feet.

Q—What kind of banks has that channel down below as far as the Bonestell House?

A—The most of the way down to the Bonestell House it has got banks. There are a few places that I could not cross it well on account of the banks being straight up and down. I have crossed that channel when there was running water in it at the Bonestell House. I crossed it first at the Bonestell House in 1873, right up where the Bonestell House stands. There was water in it then.
2191 I rode across on horseback. It didn't quite run over my horse's back; was not quite deep enough to run over his back. I last crossed there, at that point, about a week or so ago. There was water running there then. It came up to my horse's side. I think the water must have been three feet and a half deep. The water was running at that time northward. I have also crossed that channel about a mile above the Bonestell House, south.

Q—Is there a crossing at that point?

A—We used to have a crossing there that we passed at. I first crossed it there in 1873, and it swam my horse.

2192 I have crossed it there a number of times since. I could not say the number. I have not crossed there recently. I have not crossed that channel at any other point above the Bonestell House, except that until you get up above the head of Weed Island, but I have crossed it there.

Q—What kind of a crossing was there there?

A—Well, you cannot cross there in a high stage of water, but in a low stage you can cross there. It is very boggy and bad crossing. I have crossed up where Mr. Norton's place is, Mr. Norton's ranch. I don't know what section that is on. When the water is low, there is a pretty good crossing; but when the slough is anything like full,
2193 a man cannot cross it without swimming. I have crossed it above there at the old Tracy crossing. I don't remember crossing it between the two points.

Q—Has there been any change in that channel since you first knew it in 1873, to the present time?

A—Not that I can see, any more than the drift pile.

Q—What change has taken place at the drift pile?

A—The wood that has drifted in there has been burned out and hauled out there, and left the channel more bare than it was when I went there. It has a better channel to pass through than it did when I first went there.

2194 Q—Where does the main channel run after it leaves where the wood pile was?

A—Well, it runs, I think, a little to the left of the drift pile, the main channel does—follows down. It runs through the island, going north.

Q—You spoke of the west channel that leaves the main channel and runs westerly. Where does that channel continue to?

A—That runs down on the west side of the swamp, and empties into—comes into the slough.

Q—How is the bed of that channel where it leaves the
2195 main channel?

A—It is just a flat bed. It is a great deal higher, the bottom of it is a great deal higher than the bottom of the main channel. It is just a flat trough where it leaves the main channel.

Q—How high does the water have to be in the main channel before it can escape into the western channel?

A—Well, I think there would have to be about three feet of water in the main channel; something near that. At the point where that leaves the west channel it is a kind of a flat basin of a channel. I guess it must be a hundred feet wide—fifty or a hundred; I am not posi-

2196 tive. That channel rnus off west, near where the drift pile was.

Q—How far was the drift pile below the Dover House?

A—It was above the Dover House. It is about a mile and a half north of the Norton House.

Q—You say that is a shallow channel where it leaves there. What is the nature of the channel after it leaves the main channel?

A—Well, some places it remains a kind of wide basin; other places a well defined channel with banks to it. It continues on and it goes clear down into the main
2197 channel that runs into Tulare Lake. It joins the main channel, if I recollect right, not far from the fish-pond.

Q—How wide will that channel average, take it its entire length—I mean the channel that runs around to the west?

A—That is a hard question for me to answer, because I could not tell the width that it would average. Some places it is a well defined channel, and in other places the water spreads out, may be fifty or one hundred feet wide. I think that channel would carry about two feet and a half of water without overflowing its banks.

Q—If you should put two feet and a half of water in
2198 that channel, what would then be the widest place?

A—Well, put in two feet and a half, and there is places in it that would be one hundred yards wide. In other places it would come down to a narrow channel, where it would not be over thirty feet wide, may be forty feet.

Q—Have you ever seen the water running in that channel from the point where it leaves the main slough to where it connects again with the main slough?

A—Yes, sir.

Q—Down at the fish hole?

A—Yes, sir.

2199 Q—How often?

A—I saw the water coming down there in 1872, running water there in 1872, 1873 and 1874. There was running water there all of the time. I was working at that time right along on that channel.

Q—What is the condition, Mr. Epperly, of the main channel that you have referred to, after it leaves the Bonestell House, down to the Button Willows?

A—Well, from the Bonestell House down to the Button Willow, just below the Bonestell House, a short distance, there is a small channel comes out to the left and

2200 breaks around. The main channel runs right down pretty near north, through the tules, to Button Willows. You can trace the channel right along all the way through. I think that channel would average, between the Bonestell House and the Button Willows about 50 feet wide, pretty near.

Q—And what depth?

A—Not over two feet and a half.

Q—You say that there is a channel puts out from that on the left, as you go down, below the Bonestell House?

A—Yes, sir.

2201 Q—Where does that run to?

A—That runs down and connects—the water connects on to the same channel that goes down by the Button Willows. I think it is about a mile below Button Willows. There the two channels run together. That is about a mile below the Button Willows, where that channel connects with the main channel.

Q—Which is the higher bed—the main channel where that side channel leaves it, or the side channel?

A—The side channel is the higher bed; the main channel is the deeper. I think the water would have to
2202 be one foot and a half deep in the main channel before it would run out in the side channel, but I took no particular notice.

Q—What is the condition of this channel, taking it from the Button Willows down to a point due east from the Dover Camp?

A—Well, there is a very well defined channel most all the way; some places very deep and other places not so deep.

Q—How much water will run in that channel without its overflowing its banks?

A—Well, I think two feet and a half of water will run
2203 in it any time and will overflow only in one place. There is one place it will overflow its banks. It would spread out about fifty yards wide at that point. I think if you put two feet and a half of water in that channel, the widest in it will be about fifty feet, may be a little more; I can't be positive on that.

Q—How often have you crossed that channel between those points, between the Button Willow and the point opposite, due east from Dover's?

A—Well, I could not enumerate the times that I have crossed it. I have crossed it, I don't suppose,

2200 less than a thousand times, as far as that is concerned.

Q—At how many different points?

A—At most every point it could be crossed at all. There is places there you can't cross it on account of the depth, and a number of them, too.

Q—What is the condition of that channel from the point opposite Dover's House, where you left it, down to the fish pond?

A—From opposite Dover's House there is one place down next to the fish pond that the water spreads out a little; the water spreads out there, and the channel is not so well defined between Dover's House and the fish
2201 pond. The channel at that point is about two feet and a half deep when full of water; that channel, after it reaches the fish pond, still runs north.

Q—How many channels are there going north after you reach the fish pond?

A—If I remember right, there is two running north.

Q—Well, now, keeping the easterly one, what is the condition of the easterly channel from that point down to a point opposite the adobe holes?

A—A good portion of the way it is a well-defined channel; some places along there the water spreads out and makes a wide———; covers a scope of may be one
2202 hundred feet; may be more or less; I couldn't say, because I don't know anything more than just from the boards I have up, passing over it and looking at it; I never measured it in those places; I think that that channel between those points will carry in most places two feet and a half, may be three feet of water.

Q—Have you ever seen water running in that channel from the Bonestell House down to the adobe holes?

A—Yes, sir; I have seen it running there a number of times; I could not tell exactly the number of times. Every year, that there is any water to amount to anything in the swamp, I have seen the channel full.

2203 Q—What is the condition of that channel from a point opposite the adobe holes down to Salt Slough?

A—Opposite the adobe holes, a portion of that channel is well defined; there is one place in there, it is a kind of flat basin again, the same as I speak of above; I think the place where that basin is, must be a half or three-quarters of a mile there; it may be a little more, but I think about that.

Q—How much water will that place carry between the adobe holes and Salt Slough?

A—On this flat portion of the country, I don't sup-

2208 pose that the water would get over two feet and a half —that it would carry over two feet and a half, until it would spread out over a big portion of the country; it would spread out over a quarter of a mile wide, and then it would come down into the main channel again. Where the channel is better defined, it would carry a great deal more water.

By Mr. Garber. Q—It would carry more where?

A—Further down the channel, below the place that I speak of where the water spreads out.

By Mr. Houghton. Q—What is the condition of that channel from Salt Slough down to what is known
2209 as the Tule House?

A—It is a well-defined channel all of the way. That channel must be—I think it would average five feet, if not six, and it is from a hundred to one hundred and fifty feet wide.

Q—Have you ever been in that channel?

A—I have. I have traveled that channel, right in the bed of that channel, from the Tule House to the mouth of Salt Slough; I don't remember of traveling any farther north or south in that channel; I have crossed it in different places above that.

Q—What is the size of that channel for the first two
2210 miles south of Salt Slough?

A—Well, I think that that channel from the north of Salt Slough, for two miles there, will average, anyway, fifty feet in width, and I think the channel will average something near four feet in depth. I never have seen water running in that channel between Salt Slough and the Tule House; I don't remember of seeing water in it. At the time I came there that country was dry, and remained dry until I removed away from there; that is, when I removed to the lower end of the swamp there was no running water there, and it remained so until I
2211 left there. There was still no running water when I left there.

Q—Now, Mr. Epperly, to go back to where we left this western channel. What is the size of that channel running from the fish pond down to the adobe holes?

A—Well, in places it is a well defined channel, and other places it is not. There are places in it that the water spreads out maybe a hundred feet wide, maybe more.

Q—How much water will that channel carry?

A—Well, when it is a hundred feet wide, I think there will be about two feet and a half or three feet of water in it.

2212 Q—Has there been any change at all in that channel since you first knew it, at any point?

A—Nothing more than down about four miles below the Dover Camp, where the canal broke, there has a mass of sediment filled the channel up there. I can't tell you when that took place. I was not here when it happened. It must have been in 1878, the winter of 1878. I think that filling process has taken place along the channel for about two miles or about two miles and a half.

Q—Have you been along where that sand or debris run in recently?

2213 A—Yes sir; I was along there a short time ago.

Q—Is there a channel cut through there, through where this debris and sand has run in—where this sediment has come in?

A—Yes, sir; there is a channel there, but it is not so well defined as before that sediment came in.

Q—How much water would that channel carry between the fish pond and the adobe holes?

A—Well, I could not tell you that; I could not tell you how much it could carry, because there is so much sediment turned in there, and it is in such a shape that I could not tell you much about it.

2214 Q—How much before that sediment came in there?

A—Just about three feet of water; close up to it. The average width of that channel between those points would have been, I think, forty feet; thirty-five, any how. It might not have averaged quite so much, and may have been more.

Q—What is the condition of the channel from the adobe holes down to a point opposite Salt Slough—the west channel, west from Salt Slough?

A—A portion of the way there is a well defined channel, and other parts of it there is a kind of flat channel. I think where it is flat it would be about a hun-
2215 dred feet in width. I think that channel will carry about two feet and a half of water in the widest place there; it would be deeper in other places.

Q—About two feet and a half of water in there in the shallow places? How much land will it overflow?

A—Well, right at those shallow places I think it will overflow one-quarter of the land that is laying up along there. It might be a hundred feet wide at those shallow places, or more; I could not tell you as to that; I couldn't give you no permanent answer on that, because I never saw any of those places measured.

2216 Q—What did you say would be one hundred feet?

A—Those wide places in the swamp where the water spreads out.

THURSDAY, April 28, 1881.

Testimony of F. M. Epperly (Continued).

By Mr. HOUGHTON. Q—What is the size of the
2217 west branch of Buena Vista Slough from a point opposite Salt Slough, or due west from Salt Slough down to a point opposite the Tule House?

A—Well, as well as I recollect there is a well defined channel from a point about due west of the Salt Slough, opposite, pretty near, nearly due west or opposite the Tule House. All along in there there is a well defined channel. I have been along that slough a number of times; I could not tell you the number.

Q—Have you been all along it between those points, between a point west of Salt Slough and a point west of the Tule House?

2218 A—Yes, sir; I have passed all along there, across it in different places.

Q—Well, then, about how wide will it average?

A—Well, I should think it would average nearly one hundred feet.

Q—How deep?

A—On an average I think it would be six feet deep. Some places it is a great deal deeper than others.

Q—Is there a slough running from the west slough to the east, at or near the Tule House?

A—About three or four miles, if I recollect right,
2219 maybe five, above the Tule House there is a slough runs out of the west channel, and makes across into the east channel, that the water passes through when the water gets—I suppose when the water would get to be four or five feet deep, maybe not so deep, in the west channel. It will pass through from that channel into the east channel.

Q—How wide is that connecting slough that you spoke of there?

A—Well, that is a flat slough; it must be one hundred or one hundred and fifty feet wide, maybe two hundred feet wide. It is a wide flat slough. That slough

2220 would carry without overflowing its banks, I think it would carry four feet of water.

Q—I ask you, Mr. Epperly, to look at this map, Map 3. Here is the Tule House, and there is a slough on the map, running across, just above it. Is that the slough you refer to?

A—Yes, sir.

Q—Is that about the locality of it?

A—That is about the locality of it, somewhere near there. I think it intersects this slough at least three miles above the Tule House. I may be mistaken.

Q—Is not there a slough that comes right out at the
2221 Tule House?

A—Yes, sir; there is a branch of this slough runs off, comes in across there, and connects at the Tule House; that is a branch of this same slough.

Q—Then this slough that you have been testifying about is the slough that runs across above the Tule House?

A—Yes, sir.

Q—What kind of a slough is that that runs across from the west, that you speak of, from the west slough to the east, and connects at the Tule House?

A—Well, that is a shallow slough; it is not very deep.
2222 I couldn't say correctly as to how deep the water would have to be in the western slough before it would run into that connecting slough, because I never saw the water running in the slough there.

Q—Do you know which bed is the higher of the two?

A—The main channel is the lowest, it is the lowest in the main slough. The bed of this side channel is higher than the bed of the main slough; there has to be some water in the main slough before it will run out, but how much I don't know.

Q—How long during the high water in the spring, when the snows are melting, does the water, running
2223 down through Buena Vista Slough, usually remain outside of the channels?

A—Well, it generally gets back into the channels the last of July, when there is a heavy head of water running down. If there is not a heavy head of water running down, it will come back into the channels sooner. It depends altogether upon the amount of water that is coming down the river.

Q—Well, how did the water, during the years you were there—1872, 1773, 1874 and 1875—continue to remain after it had gone back into the channels?

2224 A—Well, in those shallow places in the channels, the water would be spread out. Where the channel was well defined, most all of the water would run in the main channel.

Q—Well, during those years, for what portion of the year would the water continue to run on through those channels toward the lake—during the years 1872, 1873, 1874 and 1875?

A—As far down as I was, it was running all the time; that is, from Dover's Camp to the lower end of Weed Island. It was running the whole year round, as well as I recollect; I may be a little mistaken on that, but I
2225 think not.

Q—When the water recedes and is confined to the channel, after the spring freshets are over, what portion of the swamp land, along the slough there, can be traveled over by man and beast?

A—I think about four-fifths of it can be traveled over.

Q—When the water recedes so that it is confined to these main channels, what effect has it upon those side or high channels?

A—Well, these side channels, the water stops flowing into them and runs back into the main channel and flows down the main channel.

2226 Q—What change, if any, has taken place in the channels—the eastern and western channels of Buena Vista Slough—since 1871, when you first knew them; taking the whole channels all the way through?

A—Well, as far down as I am acquainted, I didn't perceive any particular change in them, any more than that drift that was in the main channel, just below Mr. Norton's Camp, has been removed by fire, and by people carrying the wood away.

By Mr. Houghton. Q—Are the waters running now in the same place they were when you first knew them?

2227 A—Yes sir. I don't see any change in them, only in one place; there is one place below Mr. Dover's Camp, where there is a break in the canal, that has filled with slush, and fill up this main channel in a measure.

Q—When you were on the slough from 1871 to 1876, at Dover's Camp, did you have a boat there?

A—Yes, sir, I did, and I used it; I used it for running around, getting out around in the tules, crossing the west channel there and getting on to some islands that lie right in front of the cabin. I have been up the slough I guess as much as a mile, or may be a mile and a half; and I have been down it about that distance, but not any further in the boat.

2228 Q—Mr. Epperly, with regard to the pumps which were running there in 1879, during what portion of the day or days were those pumps running?

A—There was a while there, I don't recollect exactly how long, they was running night and day, but I don't exactly remember the length of time. It was quite a while though that they were running night and day.

Q—What was the condition of the feed on the swamp lands during the time that you were there and ran those pumps in 1877?

A—Well, all the feed that was there was this dry nut grass and tules; that is about all the feed that I saw.

2229 Q—Did the cattle suffer from want of feed?

A—Well, I suppose they did, because the feed was too dry. There wasn't no water running down through the swamp to make the feed green, so that they would suffer more or less from the want of feed. If there had been plenty of water running through those sloughs, so as they wouldn't have to travel so far to get to water, they would have done a great deal better than they did.

Q—You have referred to the dirft in the main slough, a drift pile not far from Dover's, a mile and a half below?

A—Below Norton's?

2230 Q—Norton's. Did you ever see that drift-pile?

A—Yes, sir.

Q—What did it consist of?

A—Just a mass of timbers, different kinds of brush, and such like, drifted up into a heap.

Q—Were there any logs there?

A—There was logs in it. There must have been logs in it from a foot and a half to three feet through.

Q—What kind of timber, do you know?

A—Well, there was different kinds of timber; there was some willow, some pine, and some of this mountain cedar in there. I think there must have been logs there
2231 thirty or forty feet long, maybe fifty feet long. I never measured any of them, but I judge from the looks of them that there must have been logs there that length.

Cross-examination of

F. M. Epperly.

By Mr. Flournoy. Q—You say you pumped sometimes day and night?

2232 A—Yes, sir. There were but two single pumps; these were two pumps pretty close together, and ran by one-horse power; four-inch pumps. I should think when the double pumps ran day and night they would water nearly three thousand head of cattle. If I remember right there was twelve pumps, ten double pumps, if I recollect right, nine or ten, I ain't positive; they would supply about thirty thousand head of cattle, to run them night and day; I could not say as to the amount, the number of cattle; the pumps worked freely, and there was plenty of water for the pumps.

By Mr. HOUGHTON. Q—Mr. Epperly, was there any
2233 disease among the cattle down there during the time that you were running the pumps in 1877?

A—In 1877 there was not, that I know of.

Q—You would have known it if there had been?

A—I think I would; I have been there when there was disease among the fat cattle, and I never seen poor cattle die of the disease that gets among them there.

Q—What condition was the cattle in when that disease or fever attacked them?

A—It is cattle that are fat that the fever attacks; at least I have always found it so.

Q—How long do they live after being attacked with
2234 that disease?

A—Well, they live from two to four days.

By Mr. FLOURNOY. Q—How many cattle were running there at that time, in 1877?

A—That I could not tell you.

Q—Do you reckon there were sixty thousand?

A—I could not tell you anything about it, about the number that was running there, because I was only working at those pumps.

Q—Well, if you had plenty of pumps you could have supplied plenty of water for the stock, couldn't you?

A—I suppose, if a man puts in pumps enough, he
2235 could; yes, sir. Wherever the pumps were, there was water enough for what cattle came to them to drink.

Q—You stated yesterday that in 1877 there was feed enough to carry the stock that was down there. Was that the fact?

A—Provided there had been plenty of water there, there would have been; but when the water does not run, then the stock has got to go so far to get water, to get feed and to get water, that they perish.

Q—Well, I ask you whether you did not state yesterday that there was feed enough there on the swamp lands to carry the cattle?

2236 A—I don't think I did; I might have said it, but I don't think I did; I ain't positive; I know there was feed enough there to carry the cattle; if I remember right I said I thought there was feed enough.

Q—Have you changed your opinion on that subject?

A—Nothing more than I have changed it this much: that if the water had been plenty, of course the cattle would have done better on the feed that there was.

Q—There would have been plenty of water if there had been plenty of pumps, wouldn't there?

A—Yes, sir. I don't know the number of pumps a man would have to put in to make plenty.

2237 Q—You spoke of a slough this morning—starting out about four or five, or five or six miles south of the Tule House—a connecting slough between the east and west channels?

A—Yes, sir. It starts out from three to four miles; may be a little further south of the Tule House. I ain't positive about the distance; it is nothing more than guess-work about the distance for me.

Q—That is the slough that you think would take four feet of water in the west slough before that would have any water in it?

A—Before the water would run through from the
2238 west slough into it.

Q—How much water do you think that slough would carry before it would overflow?

A—Well, I think it would carry five or six feet of water before it would overflow clear across from one slough to another.

By Mr. Houghton. Q—Mr. Epperly, when were you last along the western bank of this slough from the point where the water runs in from the break in the canal, going north?

A—It has been but a short time; it has not been but a couple of weeks ago at the furthest.

2239 Q—What was the condition of the water in that slough from the point where the water runs in from the break, running north?

A—There was a portion of the land in those low, flat places—there was a portion of the land that the water has spread out over; in other parts it was running in the main channel; following the main channel down.

Q—How far did you follow that main channel on the west side?

A—I followed it down about three miles below the adobe holes; I found running water as far as I went.

2240 Q—You say that you found running water three miles below the adobe holes?

A—Yes, sir.

Q—When were you last on that part of the channel that runs from headquarters, or Wible's Camp, down by Bonestell's?

A—I was on that channel last Saturday.

Q—How far did you follow that channel from headquarters?

A—I followed it from the Bonestell House up to Norton's Camp.

Q—What is the condition of that channel between
2241 those two points?

A—Well, if I remember right, I didn't see but two or three places that was flowing over the banks any. There was some low places making out, that the water was breaking out into; one place very close to the drift where the water was running out. It was running out in that flat channel on the west side, in the western channel. I crossed the water there running into the western channel; I don't suppose there was over ten inches in depth of water running out there, maybe more. When I crossed there in the main channel I think there must have been about four feet, or very nearly it; I should
2242 judge just from the appearance from the bank. I crossed the channel at the Bonestell House. At the Bonestell House there must have been four feet of water in the channel. I didn't follow the channel below the Bonestell House that day. A little over a week ago I was on that channel below the Bonestell House.

Q—Did you at that time follow that channel at all below the Bonestell House?

A—Yes sir; I was down on the channel to the clump of willows, the Button Willows there. The water was running below the Bonestell House at the time I was there, I should think a mile. I didn't go right to the
2243 end of the running water, but I was riding across it just above the end of it a little ways; I was at a point where I could see the end of the running water; it was passing along down the channel. I passed down the channel a little ways, and then rode back across it. At that time I followed the channel from the Bonestell House up to headquarters. The water at that time was all confined to the channel; it was not overflowing the banks, no where.

By Mr. Flournoy. Q—This channel that you spoke of that makes out south of the Tule House, the connect-

2244 ing channel between the east and west sloughs, did you say about what distance south of the Tule House that was?

A—Well, it must be three or four miles, maybe not so far, maybe a little more; I couldn't say positively; I think it is not over five, nor less than three miles; it is not over five, and not under, I think, three miles. It requires a rise of four feet in the west channel before the water would flow out, and this connecting channel would carry about five feet of water before it would overflow its banks.

Q—Throughout its course?

2245 A—Completely, until it runs into——

Q—From one slough to the other?

A—From one slough to the other.

Q—Then, you spoke of another channel connecting the east and west sloughs at the Tule House. What kind of a channel is that?

A—That is a channel; in some places it is well defined, and in others it is not so well defined; it is a channel that the water would run in. The shallowest part of it, I guess, when it is full it would have two or three feet of water in it; I think it will carry all of three feet of water before it will overflow its banks; I could

2246 not say exactly how high the water would have to get in the western channel before it would run into that one, because I never paid no particular attention to the channel at the mouth, where it goes out. That channel is not marked on that map (referring to Map 3).

Q—(Referring to Map 3.) Here is the Tule House. Is the channel that you speak of, that is from three to five miles south of the Tule House, marked on that map?

A—This is the channel, if I recollect right, (indicating on the map.)

Q—But that is not a half a mile south of the Tule

2247 House?

A—Well, this is intended for the channel; it must be; that is the way the channel runs from one slough to the other.

Q—If that was intended for the channel, that map is wrong; it ought to be about here, somewhere, some three miles further?

A—Yes, sir.

Q—Those are the channels that you spoke of?

A—Yes, sir.

Mr. Gabber. Q—Where is the other one—the new channel? That is not on the map?

2248 Mr. FLOURNOY—He says the deepest channel there is neither one of them on the map. He says the one he spoke of as connecting at the Tule House he supposes was intended for it, but it does not make the connection. The other one runs from three to five miles south of the Tule House.

Mr. GARBER—There is one still further north; the furthest north is the one. I would like to know where it would lie.

Mr. HOUGHTON—That is not on the map.

Mr. GARBER—Where is that?

Mr. FLOURNOY—He says it is right opposite the Tule
2249 House. It starts in there at the Tule House.

The WITNESS—It starts in here and runs down somewhere around this way and strikes the Tule House.

Q—The other would be down some three or five miles south of the Tule House.

Mr. GARBER—It runs about parallel with the one that is on the map?

A—Runs across about in the shape that this does, if I remember right.

Mr. FLOURNOY. Q—So, then, neither one of those channels are correctly marked on that map. Just take your seat Mr. ——. Did you trace out both of those
2250 channels?

A—I have traced the east channel; I have rode over—

Q—(Interrupting.) I mean the two connecting channels that you say at the lowest point would carry so much water?

A—One of them I have traced out; I have been through there a number of times; the other one I never did trace out. I traced out the channel that makes out from three to five miles above the Tule House—south of the Tule House; I went through that channel a number of times, connecting the east and west channels—the connecting channel; I have rode back and
2251 forth through that a number of times

Q—I understand you have crossed it a number of times, but did you ever trail it?

A—I have followed the channel from one slough to the other.

Q—And that is a channel, you think, that will carry about five feet of water before it will overflow its banks?

A—No, sir; the main channel is the one.

Q—How much will that cross-channel carry before it will overflow its banks?

A—Well, that would carry four or five feet of water,

2252 I think, before it would overflow its banks at the lowest point. There is a formation of two islands; it passes through between those two islands—this channel does.

Q—How wide is that cross-channel at the narrowest place?

A—Well, I am a poor judge of distances; I never saw any of those places measured in my life; I should think it would be two hundred feet; may be one hundred and fifty feet; may be not over a hundred, I couldn't say, at the narrowest point. At the widest point it would be—there is not much difference in the width of it, the whole length of it, as I can see; pretty
2253 near the same; very little difference. In 1871 I settled there at Mr. Dover's Camp—where Mr. Dover's Camp is; I don't know what section that is on; as far as the sections are concerned, I know nothing about the sections, but I think it was Section 1.

Mr. HOUGHTON—That is Dover's Camp? Section 1, T. 29 S., R. 21 E?

A—I came there sometimes in May, and my business was caring for hogs at that time; I owned hogs; I owned no land there; I got land of Mr. Crocker there; rented it from him. I came there in May, 1871, and I left there in May, 1876; I was there five years; the
2254 range for my hogs was from the lower end of Weed Island down to about five or six miles below the Dover Camp—making a distance, I should think, of about nine miles—eight or nine miles in length, the range that my hogs ran over; might be more; might be less; I couldn't say.

Q—How much land did you rent from Mr. Crocker?

A—I rented with the privilege of running hogs in there; no particular land specified at all; I could not tell exactly how much I did pay him for it; I worked for him a great deal; I never paid him anything in money; what I did pay him was in work; a portion of the work
2255 he paid me for, and a portion of it he did not; it was understood that I should look out for stock there, and attend to the stock there, for the privilege of running my hogs there; I attended to the cattle; when I saw any in distress, bogged down or anything of that kind, I relieved them; that was understood with Mr. Crocker when I went there that I should do that for the privilege of running my hogs there; he paid me for my work at the pumps.

Q—Did you ever follow that channel all along, the west channel, from about the south end of Weed Island to the adobe holes?

2256 A—No, sir; I never followed the channel all the way down.

Q—Did you ever follow the east channel all the way down?

A—No; I can't say that I ever did follow the east channel all the way down; I have crossed at most every point on it, though, passing around backwards and forwards.

Q—Did you ever follow the channel from Weed Island, all the way, every bit of it, to Wible's Camp?

A—Yes, sir; I have been around the bank of the slough all the way through.

2257 Q—You have been all along there?

A—Yes, sir.

Q—Was it the same channel all the way?

A—With the exception of that drift pile, as far as I remember; I don't see any change from the first time I ever saw it to the present. The drift pile I speak of is above Norton's Camp about a mile and a half, I think; it is but a short distance from the south end of Weed Island; I couldn't tell you exactly how far; I don't think it is over a mile; maybe further; I never paid any particular attention to the distance.

Q—How far is it from opposite to Norton's Camp on
2258 the slough to Weed Island?

A—I could not tell you for the very reason that I never paid any particular attention to it.

Q—Norton is on the south line of Section 10. How far is it from that point to Weed Island?

A—I don't think it is over two miles and a half; I don't know, but I don't think it is; I think the drift pile is about a mile and a half below Norton's Camp; it may not be over a mile; I don't know what section Weed Island is on; I don't know nothing about those sections at all; I have never paid no attention to them.

Q—You think it is only about two miles from Nor-
2259 ton's to Weed Island?

A—Yes, sir; I think it may be two miles and a half, and maybe three; I don't know; I don't know anything about the distance except from riding over it; I don't think it is over three, but I don't know; I couldn't say as to that; I couldn't tell you how far it is from the south end of Weed Island to the drift pile, because I don't know; I never more than passed over the land; I should think it was not more than a mile and a half, maybe not so far; I couldn't say, because I never saw it measured, nothing more than passed over it; I think the drift pile

2260 is about a mile and a half to the northward of the Norton house; it is all guess work with me; I never saw any of that ground measured; I don't know of but one place where there is a drift pile in the channel between Norton's camp and Weed Island; I have traveled all up and down that channel in different directions, and I don't know of but one place; I couldn't say that I have traveled every foot of it; a man is not liable to step over every foot of it.

Q—I mean, have you been on the margin of it all along?

A—I have been on the margin of it all along, from
2261 the Bonestell House to Norton's Camp; I have been on it as far up as Wible's Camp; I have seen it in holes.

Q—How high is the bed of the lowest part of that channel above the swamp land around it?

A—Well, I don't know that the bed is any higher than the swamp land.

Q—I mean the shallowest part, where the channel is the shallowest; how high is the bed above the swamp land on either side of the channel?

A—Well, I don't understand your question, because I never saw a bed that was higher than the land around it.

2262 Q—Then you say that the bed of that channel there is lower than the surrounding swamp land, or that part of it about it?

A—That is my idea about it; just from my view, seeing it; I never saw it measured; I saw it and rode along it, and looked at it.

Q—Is that the condition wherever you have spoken of the different sloughs, all through the swamp land district, that the bed of the slough is lower than the surrounding swamp land?

A—It is in general; yes, sir; all the places where I
2263 ever noticed it, it is. In some places the banks are well defined and high, good banks; in other places the banks is—

Q—(Interrupting.) I understand that; are the banks of the slough, the top of the banks of the slough, lower or higher than the surrounding swamp land?

A—In places they are higher, and in places they are lower; they are the same height as the surrounding swamp land; of course they are not lower; but they are the same height as the land lying back from them.

Q—In some places they are that way, and in some places—how many places are they higher? In what

2264 proportion of it are they higher? Are they higher in any place?

A—Well, I couldn't say for certain about that, because it is only from my eyes that I know any of these things at all. A man's eye is liable to be deceived about the level or land or anything of that kind; I have trusted to my eye in all this examination; I never made any measurements, and have never seen any measurements made of it.

Q—Did you ever see the water rise when the floods would come down; see the rise and how the water rose in that swamp land district?

2265 A—Yes, sir.

Q—Will the water connect all through there—through the various channels that you have spoken of—in the channels? Will it make connection before it will flood the surrounding low lands?

A—Well, it will flood a portion of it where those shallow places in the slough are; it will flow out over a portion of that land and then come back again and pass into the channel.

Q—Will it flood it before it makes connection in the channels?

A—In those low places?

2266 Q—Yes, sir.

A—It will run out in those low places different widths, before it connects in the channels.

Q—Do you know any place at all, Mr. Epperly, from Wible's Camp to the Tule House, where you can cross that swamp land district without striking any channel at all?

A—No, I don't without striking any channel at all; I know places where I can cross where the channel is small.

Q—I don't mean crossing in a straight line. I mean, don't you know, that there are places there that you can

2267 cross by riding around the hole, the depression, without striking any channel at all, from the east to the west, or from the west to the east?

A—No, sir, I don't.

Q—You do not; well, what would you always find in the shallowest part of the channels that you speak of now?

A—Well, I would find a body of water running down through the swamp; if there was no water in the shallowest places that I know of in there I would find a depression in the land, where it would possibly take two

2268 feet and a half of water to throw it out again, and spread it outside over the ground; I think it would carry at least two feet and a half of water.

Q—In Township 28, Range 22, here, just north of the fish pond, say nearly three miles; we will take this place here (refers to Map 2). Are you familiar with these channels on Sections 9, 10 and 3? There is the fish pond; here is the adobe holes; it is between the two that your stock ranged all along here. Now, there is 9, this is 10, and there is 3. Are you familiar with the channels in these sections there?

A—I don't know anything about the sections.

2269 Mr. Flournoy. Q—I understand; I put it at a point between the two points where your hogs ranged; 9, 10 and 3; here is the fish pond, 3 miles to the south; now, here is the adobe holes about the same distance, or a little more to the north.

A—My hogs ranged in there, when I lived there five years at Dover's, from the end of Weed Island to about three miles down below Dover's.

Q—I understand that. I ask you now if you are familiar with it? Have you traveled over that land?

A—I have traveled over that; yes, sir.

Q—How is this extreme western channel along there?

2270 A—That small channel is a low, flat channel.

Q—How much water will it carry before it will flow through Section 9?

A—That I couldn't tell you, because I have never paid any particular attention to know how much it would carry. I have crossed through there, though. There is a slough right there; I know the place.

Q—How is the channel along there, just to the eastward of that well, passing through Section 9?

A—I don't know what Section it passes through. There is a very good channel right east of that well.

2271 Q—And this extreme eastern channel, how is that in there?

A—Well, that channel isn't so well defined.

Q—You are certain there is no point along on these sections there that a man can go through without crossing a channel from the east to the west?

A—I am pretty certain that there is no point.

Q—Do you know the fact, or not?

A—Well, I never found any point that I could cross there; I have been in that channel at different times and in different places, and I never found any place that I could cross there; I have passed backwards and for-

2272 wards all through there; I never traced the channels along there.

Q—Neither one of them?

A—To trace the channel, I never have; I have followed them up and down a little ways and then passed out; I have passed up and down in this channel, the eastern channel.

Q—And you know that that is a well defined channel crossing Section 10?

A—That channel on the east in some places is well defined, and in others it is not so well defined.

Q—How much water would it carry in its shallowest
2273 part before it would overflow the surrounding swamps?

A—I should think it would carry two or three feet of water; I couldn't say, because it is only guesswork with me; I never saw it measured.

Q—This well that I pointed out to you on the western channel, is that well in the channel, or is it not?

A—It is on an island; it is on a little round knoll or mound of ground in the tules, by the side of the channel, between Norton's Camp and Weed Island; I don't know of any well; I know of two wells on Weed Island; there is a well south of Weed Island at Mr. Norton's house; I don't know of any other wells south of Weed
2274 Island, except that one; I know of some wells southeast of Weed Island; there is some over there on Mr. Dixon—right on the lower end of Mr. Dixon's land; and there is another on east slough; it is the same as this other one; it is on a knoll or high rise in the ground; by the east slough, I mean a slough east of the one I have trailed from Bonestell's House up to Norton's; it is a kind of outside slough that the waters run in, in a very high time; it is just a low, flat depression in the ground, where the water runs out at a high time; in some places it is a very good channel, and in other
2275 places no channel at all; it spreads out. In some places it is nothing more than just a low swag; I can't tell how much water that low swag would carry; I guess it would carry a foot before it would run over; may be it would carry more, I couldn't say; it is on a knoll, pretty much the same as the other well; I could not tell you how far down the water was running last Saturday; I was there at the Bonestell's House, and there was water running there last Saturday; I was not any further down on it than there; was not down about Dover's hog camp, nor at Dover's hog camp.

Q—Well, where did you see the water in the western channel, last Saturday, running?

2276 A—Running out there close to the drift; I crossed it there at the drift, about a mile and a half from Norton's house, the only drift I know of; I was there sometime in the afternoon, last Saturday.

Q—Where was the water coming from?

A—It was coming out of Buena Vista Slough.

Q—Where? At what point?

A—It was running out, as I said a while ago, right below where that drift was running out in that side channel—that side channel that runs out there.

Q—Well, did it first start out of its own motion, or was there any rise in the slough?

2277 A—That I couldn't tell you, whether there was any rise; there must have been a rise from the time I was there before, because the time I was there before there was no water running out; there must have been some rise in the slough; I don't know how the water came to rise there; I don't know where it came from into this swamp land below the canal dam; I was not to Dover's house last Saturday; I was only on the channel at the Bonestell House, and from there started up to Norton's house, followed along up through Weed Island to Norton's house; I only crossed.

Q—Right below the Norton house?

2278 A—Yes, sir; about the main slough.

Q—When did you see that main channel north of Dover's house; north of the adobe holes, or any part of that west channel to the northward?

A—Well, I have seen it in the last two weeks; I couldn't say what day it was; I don't remember; it must have been about the eighteenth of this month, or the nineteenth may be—somewhere along there—and may be the twentieth of the month; I ain't positive; I was then along the west side of it.

Q—From what point to what point?

2279 A—I went from Dover's Camp; followed the road right down on the outside of the swamp, down to the adobe holes; I didn't follow the channels clear from Dover's Camp; I was on the channel there for about—I struck the channel just below the adobe holes and followed the channels down as far as there was any water running; I should think three miles below the adobe holes; the water was running for about three miles below the adobe holes; I don't know when it commenced running there; I couldn't tell you when I had last seen the western channel below Dover's house before that; I was along on it there, though not work-

2280 ing; all along in there in March last; I think there was water running there then; I don't know how far it ran down.

Q—Do you know where it came from?

A—Well, I suppose it came out of Kern River; I don't know of any other source for it to come from.

Q—How did it get into Buena Vista Slough?

A—I don't know any other way unless it is turned in through the head gate. I did'nt see it turned through. I don't know any other way for it to come there. I mean the head gate at Mr. Wible's head-quarters, up in the slough there. I know there was a break down
2281 below Mr Dover's, and has been for a long time. And I know the water ran off from that, and ran from that down to the adobe holes. I don't know exactly the date, when it commenced running from that, because I didn't pay any particular attention to it. It has been such a common occurrence, water running down there, that I paid no attention to it.

Q—Was it a month, or two months, or three months. Can you come within a month of it?

A—I couldn't say whether I could or not, because I paid no attention to it whatever. I think it must have been running through in January or February.
2282 Q—And it has been running since, continuously through there?

A—No; there was a while it stopped running there. I could not tell you for how long. Then it began again in this month—may be the last of March. It was about the first of this month, or the last of March, I think; I ain't certain. I live about four miles above there, south. I came out to Dover's camp in 1871, and remained there until 1876. There was plenty of water running down past that point when I came there to Dover's camp in May, 1871, and I think it ran
2283 along—I think there was running water there on the last of August.

Q—Was it spread out over the swamp any, when you got there in May?

A—There was a portion of it covered and there was a portion of it that was not. You could ride over the most of it. If I recollect right it went back into holes, sometimes in the last of August. In the slough there was running water in August, but I forget exactly the time. I think it stopped running in the sloughs about the last of August. but I won't be positive. I could'nt say in all of the sloughs, because I

2284 was not on all of them. I traversed the sloughs in 1871, but a short distance, for the reason that I was afraid to travel around through the country to amount to anything. I was not acquainted along in there. I was afraid I would get into some of those deep sloughs. After the water dried out, I travelled around there considerable.

Q—Did you see all the sloughs then that fall?

A—I couldn't say that I did. I think that I did too, because I was travelling around most of the time. The water came down again in 1872. I could not tell what time, but I think it was some time in De-
2285 cember.

Q—You think it was in the holes from the latter part of August, 1871, until about December, 1872?

A—No, sir; it dried up entirely, finally; it quit running there in August.

Q—In the winter of 1871?

A—Yes, sir.

Q—And remained that way until the water came down, about December, 1872?

A—Yes, sir; in 1873 there was plenty of water running there, if I recollect right, all the year, if I remember right.

2286 Q—How was it in 1874?

A—If I remember right, in 1872, 1873 and 1874, there was water there, plenty of it.

Q—In 1872, 1873 and 1874? I thought you said the water did not come down until December, 1872; you mean, from December, 1872, up to the latter part of 1874, there was plenty of water?

A—I have got that wrong.

Q—Well, now, let us have it.

A—Because the water must have come down there in December, 1871, because December, of course, is the last month in the year, and it must have been in
2287 December, 1871, that the water came down there, and there was plenty of water all through 1872.

Q—1872, running all the year?

A—Well, I think there was, pretty much all the year, running water there; it was running where I struck it; any point that I was on it there was water running. I was not a great ways north on it then, at all. I was down as far as the adobe holes; early in the season I was down there; I was not down there later in the season, in the summer or fall. I don't know whether it ran down there in the sloughs late in

2288 the season; I was not there. I was down there in 1873, about the same distance; I don't know that I was any further down along the slough. I was down there in June; there was water running there when I was there; I don't know whether it continued to run during the summer and fall or not; I didn't see it. I don't remember being there after June, at all.

Q—Below your house?

A—Only a short distance; five or six miles below my camp, as far as my hogs ranged.

Q—Was the water running all the year at your camp?

2289 A—There was water running there, yes, all the year.

Q—Now, in 1874, how far did you go down?

A—I never traveled down on that swamp any distance. I worked—I stayed most of my time in there; below where I traveled, I don't know how it was down there in the summer or fall of 1874. I traveled about five or six miles below the Dover house; that is where I worked, in that range. If I remember right, there was plenty of water there, I think, the whole year; I think there was running water; I may be mistaken. I couldn't say that I was or was not, because there was one year there, while I was there, that the water

2290 stopped running, with the exception of the slough. In 1871 the water stopped running, and then there was one other year.

Q—There was one other year between 1871 and 1876 that it stopped?

A—Yes, sir; that the water was not running there; but I can't tell you what year it was. I don't recollect exactly the length of time it stayed dry the last time. In 1875, if I remember right, there was plenty of water. I worked over about the same space of country that year. I don't know exactly how it was in the summer or fall of 1875, further down than I went. I

2291 never traced the channel below the Tule House.

Q—You don't know anything about it below there?

A—I have traced it back and forth. I have been down to what is called Mud Slough—I guess four or five miles below the Tule House.

Q—Don't you know that there is a place within a mile or a mile and a half from the Tule House, northward, within that distance, where you can cross from the east to the west channel, west of the swamp land district, without finding any channel at all?

A—No, sir; I don't know of any place of that kind

2292 at all. I never have seen any such place. When I left there in May, 1876, there was plenty of water. I couldn't tell you how it was in the summer and fall of 1876. I went back there in 1877; that year was a dry year. I went back there and went to work for Mr. Crocker, if I remember right, about the first days of August. When I got back there in 1877, I didn't see no running water, in any of the sloughs. I couldn't tell you when the water next came, because I left there before there was any water came down. I left there in 1877. I went there and worked about three or four months for Mr. Crocker, and went away again. I went
2293 back on that swamp in 1878 again; I think it was in October. At the point I struck the slough, there was no water except in holes. I struck it and pitched my camp about six miles above the Tule House, south of the Tule House, on the west slough, and on the west side of the swamp. There was no water in the east slough at that time.

Q—Both sloughs were dry north of the Tule House at that time?

A—They were both dry, with the exception of what water stood in deep holes. That was in October, 1878, if I recollect right.

2294 Q—When did you see water there again?

A—I never have seen the water running there since. I didn't see it about two weeks ago, between my camp and the Tule House; I wasn't there; I haven't been there lately; I left there in May, 1880. I saw the water running along to my camp two weeks ago; but my camp isn't down there at the present time. The point where I pitched my camp when I came back in 1878, is about six miles above the Tule House, south of the Tule House, on the west side. It must be below Dover's camp some eighteen or nineteen miles, and eight
2295 or nine miles, eight I think, northwest of the adobe holes. I worked up to the adobe holes. My hogs used to range up to the adobe holes. I worked up that far.

Q—Did you see any water there?

A.—No, sir; yes, I did, too, late in 1880. Along just a short time before I left there in 1880, the water got down; I seen it running there at the adobe holes. I don't think I saw it running there last March, at the adobe holes. I don't think I was there. I didn't see it running there last Saturday. I saw it running there when I was down there the last time, two weeks ago.

2296 Q—Then you have seen it running there since?

A—I have seen it running at the adobe holes, but not at my camp; where my camp is.

Q—You have seen the water running in the swamp since the time you fix it. When did it run last at your camp?

A—It must have run down in my camp in May, 1880, because as I left there I met the water coming down the slough about four miles, may be five miles, above my camp; saw the water running in the slough; just came to the end of the water, where the water was coming down. I didn't see it running at my camp. I
2297 don't know how that water got into the slough. A portion of it came through the break, this break I have just been speaking of, which is about four miles, I suppose, below Dover's house. A portion of the water went through that; I don't know that it all went through it. I don't know that any of it came from anywhere else. I suppose it was water turned out through the head gate, but I did not see it done. I saw water in the canal last Saturday. I could not tell how much. A pretty good head of water was running in it. I mean Wible's canal. It was running at Wible's head-quarters. No cattle died of any disease in 1877.
2298 I didn't see any die of disease; I don't know of any, nor did I hear of any that I know of. Right there where I was working is all that I paid any attention to. I don't know as I have heard of any dying of fever in 1877.

Q—You say that when the water is flowing sufficiently to flow over the swamp that there is three-quarters of the swamp land district that cattle can feed on?

A—No, I don't think there is in a high time when there is a full head of water.

2299 Q—What condition was it when you said there was four-fifths of the swamp land district on which cattle could move about and feed?

A—It is where it is confined to the channels, to the sloughs.

Q—When it is confined to the sloughs?

A—Yes, sir, mostly to the sloughs.

Q—Well, they could move around on dry land and do that?

A—In some places they could. In some places they would be on wet land.

Q—In some places, in the water?

2300 A—In some places in shallow, very shallow.

Q—You don't know what the season of 1876 was?

A—No, sir, I don't; because I didn't return back to the swamp any more.

Redirect-Examination of

F. M. Epperly.

By Mr. Houghton. Q—Mr. Epperly, on your cross-examination you said that you saw water running down those channels there in February or March, this year; through what channels was it then running?

2301 A—In February or March, if I recollect right, there was water running down in the East Channel. I could not tell exactly how far in the East Channel it ran during those months, because I was not down in those channels but a short distance. I must have seen it down six miles below Mr. Dover's camp, in the Easterly channel. In February or March I worked along at different points; I didn't particularly follow the channel, but I was across, backwards and forwards through there.

Q—Well, then, at what point in the easterly channel did you see it, say between the Bonestell house and

2302 six miles below Dover's?

A—Well, I saw it from a little above Mr. Dover's house, I suppose two or three miles. I was on it working along with hogs, from a little above Mr. Dover's house to quite a ways below.

Q—Well, how many miles was the water in that easterly channel running at that time?

A—I think I saw the water running; I may be mistaken, but I think I saw the water running in the channel most all the way up to the Bonestell house at that time. That was during February or March. I think

2303 so.

Q—And you say you saw it running from there to a point five or six miles below Norton's?

A—Below Dover's. That would be above the fish pond. I saw it running below the fish pond, I should think two miles, may be three; I could not say; it is quite a ways down there; I did not pay any particular attention.

Q—How much water was there at the lowest point you saw below the fish pond?

A—Well, the most of it was running in the slough. I should think it would have been three feet, probably

2304 not so much, may be more. Three feet in places, and other places a great deal deeper. I didn't follow the channel below that point. I was just crossing back and forth. I didn't see it continue on to the adobe holes myself.

Q—How long did it continue to run in that channel during February or March?

A—It ran there, I guess, until—I think there was water running there sometime the first of April—I should say the middle of March; I could not be positive. I didn't pay particular attention to it.

2305 Re cross-examination of

F. M. Epperly.

By Mr. Flournoy. Q—Do you mean to say you saw no water in the west channel anywhere in March or April?

A—No, sir; I don't say so.

Q—Well, did you see any in the westerly channel?

A—Yes, sir.

C. E. Watkins,

2306 Being called as a witness for plaintiffs, and sworn, testified as follows:

By Mr. Houghton. Q—Where do you reside?

A—In San Francisco. By occupation, I am a photographer. I have been engaged in that business for thirty years. I have been in the practice of taking photographs of scenery in this State. I have been engaged in that business for twenty-five years. I have taken photographs in Kern County; took them last in January, 1881. They were taken about Buena Vista Slough, at Tracy's Crossing; some at the bridge on Kern River. They were made on the 9th and 10th and
2307 11th of January, 1881. A number of gentlemen were with me when I took these views. Mr. Wibble was with me and the engineer, Mr. McCray, and Mr. Willow, and several others.

Q—Is this one of the views, [showing witness exhibit 29]?

A—Yes, sir.

Q—Is that a correct view of what it purports to represent?

A—Yes, sir.

Mr. Garber. Q—Was there any painting or touching up done to this photograph after it was taken?

2308 A—No, sir.

Q—No coloring?

A—No, sir.

Q—No lines and marks placed upon it by hand?

A—No, sir; none. If there is a defect in the negative—and there are always spots—they are always touched out of them. Dirt spots or a touch with a pencil leaves a white mark on the photographs, and they are always touched out. That is absolutely an untouched photograph. I have the negative here at the hotel.

Q—Is there any way you can tell about the scale of
2309 this, like you can about a map? I see a man there; he is about an inch and a half high; ain't he?

A—I don't think he is an inch and a half. I don't know that there is any way I can tell exactly. [After examining photograph]: Yes, sir; the man is an inch and a half.

Q—How tall is that man, do you know?

A—He is a tall man; that is the engineer. Mr. McCray.

Q—From that you can get at the scale of this? Would that apply everywhere else?

A—You must take into consideration the perspec-
2310 tive.

Q—Can you tell anything about how wide this sheet of water is from water's edge to water's edge? Is there any way you can tell how much it is distorted or exaggerated by the perspective or otherwise?

A—Yes, sir. Here is the engineer, and there is a man on horseback on the other side.

Q—How can you make any calculation from that?

A—The man on horseback you can measure, and then measure this one on the opposite side, and tell the perspective.

Q—It would take a long calculation to tell anything
2311 about what distances these represent, or whether this gives you a correct idea or a distorted idea.

A—It cannot give a distorted idea. There is a man on a horse and you have an idea of the height of the horse.

Q—By what process could anybody calculate the width of that river from these data? Can it be done? Can anybody calculate anything about what the width of that river is?

A—I suppose they might by measuring the objects.

Q—What would be the process?

2312 A—I am not a mathematical sharp. There are given objects. I think it could be done, but I am not sure. When this was taken it was taken on a glass plate. The picture on the glass plate was of the same size as that; it has not been changed at all. It was taken on a glass plate of the same size, and that is the negative, That is not a copy of the negative. It is a photograph from the negative, and the negative is a glass picture. It is printed from it, and is not a copy of it. We do not call it a copy. If I make a negative from a negative it is a copy. I call this an impression from the negative; the same as a newspaper
2313 is a copy from the type; just the same at that.

Mr. FLOURNOY—Will your Honor rule as to the proposition of the object?

The COURT—What is the object for which the photographs are introduced?

Mr. MCALLISTER—The object is to show the physical appearance of the different points where these photographs are taken. It shows the flow of the water, and to a certain extent, the size of the stream. It shows the elevation of the banks; and this, with reference to the Calloway Canal, shows its condition, that there was no water in it, and the appearance of the
2314 head gate, and the bridge. It shows the construction of the bridge and the width of the water there; and all of those various objects are pertinent to this matter.

Mr. FLOURNOY—Our objection is not that they may not show the physical appearance, but the physical dimension. We object to this being admitted to show any physical dimensions of any sort.

Mr. MCALLISTER—It also shows the obstructions there in the river, the sand-bars of the river, the physical appearance of the river, and also the slough, and also the Calloway Canal, It seems to me from the
2315 fences, houses and trees and the horse, and the man in those photographs, it is very easy to arrive at the relative proportions of the other objects.

Mr. FLOURNOY—That might be, if it were not for the perspective which cannot be measured.

The WITNESS—I think it can be done.

Q—You can't do it?

A—I know that. I would like to do it as a mathematician.

Q—How would you measure it? You say you could measure the water in that picture by the height of the man on this side of the river?

2316 A—Yes, sir.

Q—And then the height of the man on the other side?

A—Yes, sir, on the horse.

Q—In order to measure the height of the man on the other side, would you have to know about the distance from one to the other, or the distance of that man from where you are?

A—They are both here.

Q—And his height appears only in proportion to that distance?

A—His height appears in proportion to the distance
2317 altogether—yes, sir.

The COURT. For the purpose of showing the physical dimensions, the width of the river, the height of the objects and banks, I don't think the photograph is admissible. For the purpose of showing the physical appearance of the place where the photograph was taken, it will be admissible in evidence, and for that purpose only.

[Exception by defendants.]

Mr. FLOURNOY. And they are admitted to show the physical appearance of the particular locality, but not for the purpose of showing the dimensions on a par-
2318 ticular day.

The COURT. No, sir.

Mr. MCALLISTER. We will except to the proposition that these are not admissible also to show the relative dimensions of the objects they represent; we take that exception.

[The photograph, Exhibit Number 29, is offered in evidence by plaintiffs.]

[Here insert.]

Mr. GARBER. We will admit that the testimony will be the same to each one of them as to the one offered.

2319 [The same objection, ruling, and same exception.]

Mr. HOUGHTON. Then we offer in evidence the photographs heretofore marked respectively "Exhibits Numbers 30, 31, 32, 33, 34, 35, 36 and 37."

[Here insert all of said Exhibits.]

Mr. GARBER. We will admit that the witness will testify as to each one, that he took it at the place stated by the counsel, and that he took it just as he did the one already testified to.

Mr. HOUGHTON. Q—On which bank of Buena Vista Slough was Exhibit 29 taken?

A—On the left bank as I went down the stream; on

2320 the west bank. Number 30 was taken from the west side of the river, or the left bank. Number 31 was taken from the left bank of Buena Vista Slough. Number 35 represents the Calloway Canal, looking up the river on the right bank. Going down the canal, it would be on the left hand. This looks up the river. Number 32 was taken from the bridge across the river, looking up the river. That bridge is down the river some ways. Number 33 was taken from the right bank of the river, going down. It represents the same bridge from which the other photograph was taken.

Number 32 was taken from the top of the wagon, as
2321 represented in number 33. Exhibit 34 was taken from the center of the same bridge, looking back to the left. Number 35 was taken from the other bank of the slough, the left bank of the Calloway Canal, looking up the river on the left bank. Number 36 was taken from the right bank of the canal, as you look up the river to the northeast. Exhibit Number 37 was taken from Buena Vista Slough from the left bank, looking up the river, and right across the slough. It was taken from the left bank of the river, looking right across Buena Vista Slough. It was taken just opposite the Buena Vista Ranch. It was taken from a point of hills
2322 just opposite the old slough, an arm of the slough that goes up there a little ways. I should think that point of hills extends out farther eastward than any of the other points there. It is the point that comes way out towards the Buena Vista Ranch.

[To identify the photographs, Mr. Watkins also puts his signature upon the backs of each of them.]

S. W. Wibble,

being recalled for plaintiffs, testified as follows:

2323 By Mr. Houghton. Q—Were you present when this photograph, Exhibit 37, was taken?

A—Yes, sir.

Q—Can you fix the point that it was taken from?

A—Yes, sir; it was taken off of the top of the hill where the slough comes up to the point of the hills on the west side of Buena Vista Slough, right opposite Buena Vista Ranch.

Q—How far above, or below, where the main channel of Kern River empties into Buena Vista Slough?

A—It was probably 300 yards below that; below the

2324 mouth of Kern River, the Middle Fork of Kern River; that is, 300 yards northwest of the middle fork.

Q—That is what we have referred to as the main channel?

A—Yes, sir.

Q—Does that Exhibit 37 show upon it the middle fork?

A—Yes, sir.

Q—Does it show the north fork?

A—Yes; there is the channel of the north fork of the river upon the map. The north fork runs further north than that, and enters Buena Vista Slough north
2325 of that point.

Q—Is that the north fork that is represented on that photograph?

A—There is Buena Vista Slough, and here in the distance you see the forks of the north branch. Buena Vista Slough comes right through there, and there is a little slough that runs right in there.

Q—Then there is no fork of the river that is shown on that?

A—No, sir; not entering the slough. It just shows it in the distance. The channel of the north fork you can see here.

2326 Mr. Haggin—You say that in the distance you could see the north fork; did you at that time look at the north fork?

A—No, sir; I did not.

Q—Was there any water running in it?

A—No, sir; I don't think so

Q—Was there any water running down the Middle Fork of Kern River?

A—No, sir; here is where Buena Vista slough comes in here, where these trees cut off the view there; and that is where the slough originally ran around here
2327 and connected above; ran around to the lower right hand corner of the photograph. It run there, but that is standing water; that is dead water.

Q—All the channels of what you call New Kern River, with the exception of what you call the north fork, is shown on this photograph by a whiteish streak running through the trees, isn't it?

A—Yes, sir.

Q—There is no other channel shown on the photograph?

A—There is the channel of Buena Vista Slough.

Q—There is no other of these channels of Kern River shown on this photograph?

2328 A—These are the only two; that North Fork and the Buena Vista.

Q—Of Kern River; that is the only one?

A—Only the North Fork. There was no water that I know of in the North Branch at that time.

Q—From what point was the photograph, Exhibit 29, taken?

A—That was taken between the mouth of the Middle Fork of Kern River and the point where that was taken from on the point of hills, I should judge about two hundred feet, may be three hundred feet, north of the Middle Fork of Kern River, north of where the
2329 Middle Fork empties into the Buena Vista Slough. I mean south of the point from which the other photograph was taken.

Q—I see in this photograph, in or near the center of this body of water, a stake with some marks on it; what is that?

A—That is a gauge set in the stream there. I had a man go in and put it there at that time. It is one of the gauges used in connection with the State Engineer's Department. It was one that I had at head-quarters, and I took it up there and then moved it back. It was put in there the same day, before the photograph was
2330 taken. The cross-section was made just a little north of it, and I think there was a shallow place right in the center of the channel where this stake was put. I don't think that gauge would indicate the depth of water flowing at that point.

Q—How wide was that stream at the point where the picture was taken?

A—It was not quite one hundred feet. I had a man take the end of a chain across and measure it myself. I held the other end of the chain and took the measurement. I didn't make any memorandum of the measurement. It was a little less than a hundred
2331 feet. There is no guessing about it, because I had a hundred foot chain. It was probably about eighty feet wide.

Q—From what point was the photograph, Exhibit 31, taken?

A—It was taken right where the Middle Fork of New River emptied into Buena Vista Slough. There was water standing in there, but was not running; no water running there then. It was taken just opposite to where it comes into the slough. That is not running water; there is water there. I don't think that is

2332 all back water; that upper water is in connection. This is the slough here, just this portion of the bank in here is taken. But here the bank was so high it didn't include the west bank in the photograph.

Q—At what point was the photograph, Exhibit 33, taken?

A—That was taken on the west bank of Kern River at the Pioneer bridge. I think about that; the camera stood about 40 feet from the bridge; below the bridge. That bridge is three hundred and sixty feet long. I measured it; I had my men to chain it right across.

Q—From what point was the photograph, Exhibit
2333 36, taken?

A—That was taken from the south bank of the Calloway, that is, the right hand bank as you come up the Calloway, the left hand as you go down; the south bank of the Calloway.

Q—At what point, as regards the head-gate? In what direction from the head-gate?

A—It was west or south. It was down stream from the head-gate.

Mr. Haggin—You spoke of the head-gate near the railroad bridge; east of the Railroad bridge, in your testimony a few days since. Was that the head-gate
2334 you meant? Up the river from the railroad bridge?

A—Yes, sir.

Q—What time in the day did you go to the point? You say you were there when these photographs were taken.

A—I went up there in the forenoon; I was there about two or three hours.

Q—Was there any water running in the canal when you first went there?

A—No, sir.

Q—Had you been there previously that day?

2335 A—No, sir; not that day.

Q—From what point was photograph Exhibit 35 taken?

A—Exhibit 35 was taken from the north bank of the Calloway. The same headgate that is shown in the last photograph is shown in this.

Q—At what point was exhibit 34 taken?

A—That was taken from the south end, or near the south end of the Pioneer Bridge, on Kern River. The first head-gate shown in the picture to the left, is the head-gate of the Pioneer Canal, and that takes water into the Pioneer Canal. The next head-gate is that of

2336 the Goose Lake Canal, and that takes water from the river into the Goose Lake Canal. The third head-gate to the right is the head-gate of the Wible Canal; and the one beyond that is the head-gate of the Railroad Canal. There are four head-gates shown in that photograph. The Wible Canal is the one that I spoke of the other day as the one that I constructed myself.

Q—I will call your attention on Exhibits 35 and 36, to certain obstructions that appear in the river. What is that?

A—That is an old wing dam.

Q—Is that the wing dam that you have referred to
2337 as having been made, or a portion of it, to throw water into the Calloway Ditch?

A—It shows plainer on Exhibit 36. That point has been at some time connected with the obstruction right in front there. That is about two hundred feet out in the river, I think.

Q—How can you designate the point on that photograph?

A—It is on the right hand side.

Q—Isn't there something on the photograph by which you can designate it? Are there three men on that point?

2338 A—Yes; and it is two hundred feet from the head-gate.

Q—will you designate where that point is on the photograph by something that appears on the photograph?

A—At the point where the three men are; and one man is laying down and one standing up; this portion further in the river, shown by the black marks, is also a portion of the wing dam that has been constructed there at some time or other.

To Mr. Haggin—That is also a portion of a wing-
2339 dam that has been constructed sometime or other. I never saw a wing dam constructed there, but I saw evidences of there having been one. I have seen portions that are there now repaired since.

Q—You say that you have seen portions of the wing dam. Did you ever see a wing dam that was constructed there, of which this purported to be a portion?

A—I presume I have.

Q—When?

A—I cannot just give the date of it.

Q—Are you positive that you have?

2340 A—Yes, sir. I saw a wing dam there.

Q—Constructed out of what you call these portions?

A—Yes, sir. I have seen a wing dam constructed there. I cannot tell exactly when, but I visited the Calloway in 1879 or 1880, and saw the wing dam there, and that wing dam extended to those fragmentary portions. I am positive of that. I saw it at different times; and where these heavy obstructions are put in front there, they had changed, and this is built on another line. The point where the men stand and where the smaller obstructions are, is where the continuation of that was in 1879 or 1880; I can't say
2341 which. I visited it at different times. I know that there was a wing dam there.

Q—Do you know it sufficiently to say from what you see on this particular picture, that you can recognize that as the terminus of this wing dam?

A—I don't think it was the terminus. I think from the appearance that it had been constructed further. I was at the Calloway in 1879 and 1880 both, and I think that wing dam was there in 1879, when I was there. It was either in 1879 or the next year; I can't say positively which; but I think likely that the portion over where these men are located, was there in
2342 1879. Afterwards when I visited there, there was a wing dam extending to that small fragmentary portion. I can't fix the dates, the month or day. It was sometime probably along about May or June. It was sometime in the forepart of the season. I was there in 1879 or 1880, and I think I was there both seasons. At one time that I was there, I think it was connected with that heavy portion, and then at another time I think I was there and saw that that had been changed. And the wing dam, it might have been broken where the heavy portions is when I was there; when I first
2343 noticed it. I remember well about some new work that had been done; not so much brush, but more sand. The first obstruction there, or wing dam, is built of timber, trees and stakes and they are still there.

Q—Now, I will ask you whether you can state positively that you recognize those portions of the wing dam which you say existed in 1879 or 1880, or whether you mean that there were wing dams at those times?

A—I think that ——

Q—[Int.] Answer the question first, and then think afterwards.

2344 A—Yes, sir.

Q—You can state positively, then, that these are portions of the wing dam that you saw in 1879 or 1880?

A—Yes, sir.

Q—That you recognize them from these photographs?

A—Yes, sir.

Q—Now you can explain.

A—All the explanation I wish to make is this: that this heavy portion here is built of heavier material. That is what called my attention to it, and there are
2345 sticks, and I think there are trees in there that are five or six inches in diameter in that portion of it; and I noticed that they were very heavy timbers to put in there. This portion from where the man stands runs out back into the middle of the stream and is built more of sand, and is not of as heavy material. The head gate of the Farmers' Canal is on the opposite side of the river from the Calloway, lower down the river. I can't say how much lower down, but the present wing dam runs some distance above the Farmers' Canal. That is where I took my observations from. I walked out on this dam and I saw below the
2346 Farmers' Canal and the gate humped up in the center.

Q—Did you see anything of a wing dam at the Farmers' Canal?

A—No, sir; I think not; I have seen a wing dam there.

E. Willow,

being called as a witness for plaintiffs, and sworn, testified as follows:

I reside in Bakersfield; I know where the head-gate
2347 of the Calloway Canal is; I was on Kern River, near the head-gate of the Calloway Canal, in 1879. I was over there at different times; I was over there in the fore part of the season and in the after part. I went fishing there; I think it was in May, about the first of May, 1879. I went from here to the railroad, and footed it to the edge of the railroad bridge. I was on this side of the river, and I caught a number of fish there, and then I went right to the head-gate of the Farmers' Canal, and from there I went across to the Calloway head-gate. There was but very little water in the Farmers' Canal at the time.

2348 Q—How did you get to the head-gate of the Calloway Canal?

A—I walked over.

Q—Did you walk across the river?

A—Yes, sir.

Q—What was the condition of the water in the river at that time?

A—There was not much; I didn't get my feet wet.

Q—Did you cross right in the bed of the river?

A—Yes, sir; there was a part of the water there; there had been a dam there, and some stakes drove in there, and it had partially washed away right at the
2349 head, right below the Farmers' Canal.

Q—Where you walked across, how deep did you find the water at any point?

A—I could have walked across that and never got my feet wet. The width of it was, perhaps, ten or fifteen feet, may be fifteen feet right in front; and then after I got out there was some sluices and some standing water in them, but no running water.

Q—You then went to the head of the Calloway; what did you find there?

A—Caught some fish.

Q—Where did you cross the river?

2350 A—I went right below the head-gate of the Farmers', right at the head-gate, and went right across the river, as near as I could, to the head-gate of the Calloway Canal.

Q—Was there any water running in the Calloway ditch?

A—Yes, sir, some; there was not a great deal, but there was some; I can't say how much.

Q—Was all of the water of the river running in there?

A—The biggest part of it, I guess; there was a very
2351 little in the Farmers' Canal.

Q—Then, with the exception of what was running in the Farmers' Canal and the little that you walked through, the balance was running in the Calloway?

A—Yes, sir.

Q—Did you ever cross there again that season?

A—Yes, sir; at the same place.

Q—How long after the first time?

A—Well, I crossed it in the after part of the season, and then there was nothing in there. It was perhaps August, and I don't think there was any water in the Calloway then. That was in 1879. The first time I

2352 went across was in the latter part of May or the first of June. I went over there twice, I think, before the Fourth of July, or three times, and I crossed the same point. When I crossed it the second time there was some water in the river; not quite so much as before. I walked across the second time in the same manner as I did the first time.

Q—And the water was running in the Calloway the second time?

A—Do you mean the fore part of June?

Q—Yes, sir.

A—There was some running in there, but there was
2353 not quite so much as when I was there the first time.

Cross-examination of

E. Willow.

The first time that I crossed the river was in the latter part of May or June early, before the middle of June. There was very little water running in the Farmer's Canal at that time. There was a wing dam after we got out a little way from the Farmers. I presume it was the wing dam of the Farmers' Canal. There
2354 was a space there of twenty or twenty-five feet where there was no wing dam, right close to the Farmers. I suppose there must have been one there, but it had washed away. I walked across the fifteen feet there. There was very little water, not enough to wet my shoes. I went out on the wing dam, crossing the river. The next water I came to was in little depressions, not running.

Q—And then you went around, or crossed that, and went on to another bank or wing dam, as I understand you?

A—To the Calloway. My recollection is that there
2355 was not a great deal of water in the Calloway. Then I went down below, just above the railroad bridge, and there was some water running along there, but not a great deal. I went there again sometime prior to the Fourth of July, and there was then less water than in these several places. I went there again in the after part of the season, after the Fourth of July. It was about the latter part of July or the first of August. It was even dryer then. My recollection is that the Calloway was completely dry then, and there was not a great deal of water running in the Farmers, and all of the little streams were about the same.

2356 J. C. CROCKER,

Being recalled by defendants for further cross-examination, testified as follows:

By Mr. GARBER. Q—Do you recognize this paper [power of attorney dated August 22d, 1870, shown to witness]?

A—I cannot say that I ever saw it before. I don't remember to have seen it. I presume I have had a power of attorney from Lux & Miller, but I don't remember. I have no recollection that at any time they
2357 ever executed and gave me any power of attorney at all.

Mr. MCALLISTER. When is it recorded?

Mr. GARBER. It is not recorded.

Q—Do you recollect any talk between yourself and Miller & Lux, or either of them, about a power of attorney that they were going to give you?

A—No, sir.

Q—Do you recollect acting for them as their attorney in fact in any matter?

A—No, sir; only as a partner in the business.

Q—In what business?

A—In the cattle business here. All the business I
2358 have done has been firm business. I wouldn't say positively about that.

Q—Do you recollect acting for them in regard to these lands which are in suit here?

A—I recollect acting in conjunction with them.

Q—Do you recollect acting for them as their attorney in fact in regard to those lands?

A—No, sir.

Q—Do you recollect in the swamp land district meetings voting for them?

A—Yes, sir; I presume I have voted for them, but
2359 for myself, too.

Q—Don't you recollect that you voted for them as their proxy?

A—I might have done that; I think I have.

Q—Wasn't it under this power of attorney?

A—I presume it was.

Q—And this power of attorney then was given you for that purpose?

A—I don't think that I ever saw it; I might have seen it, but I don't recollect it.

Q—Don't you recollect now, when it is brought to your mind, that you voted for them at those meetings,

2360 and the fact that you had this power of attorney for that purpose?

A—I presume that is the intention of it, but I have no recollection of seeing it.

Q—Don't you recollect that you had a power of attorney in writing for that purpose?

A—No, sir; I don't.

Q—Did you ever talk to Miller or Lux about your representing them in the swamp land meetings?

A—I have.

Q—Did they say that you were fully authorized to represent them?

2361 A—I don't know that they ever said that to me; the most conversation that I had with anyone about it was with Mr. Brower. I left everything to him.

Q—Don't you recollect that you told Miller & Lux that you had cast certain votes for them as their proxy?

A—I don't think they ever asked me in regard to it. They never told me how I should vote. They knew I was voting for them.

Q—How did they know it?

A—I suppose by other parties interested. I don't think I have ever talked with Mr. Lux in regard to it. I might have talked to Mr. Miller about it once, about

2362 the swamp land business. He found a good deal of fault about it. I don't think they ever said anything to me about the voting.

Q—Wasn't it understood between you and them, that in regard to these lands, you should represent them in all respects?

A—That is the way I understood it.

Q—That you were to act for them in all respects, so far as these lands in suit were concerned?

Mr. McAllister—I object. In the first place it is claimed that there is a written power of attorney. In

2363 the second place, that a verbal power of attorney will not authorize Mr. Crocker to act in reference to lands.

[The objection is overruled and the plaintiffs except.]

A—I understood it that way. But still I have no recollection of their talking to me about it. That was the understanding between myself and them.

Q—You never would have presumed to represent or act for them without authority from them?

A—I think I got my information verbally from Mr. Brower.

Q—But you wouldn't have undertaken to represent

2364 and vote for them and act for them, without authority from them would you?

A—No, sir; I suppose not?

[The defendants offer in evidence the power of attorney.]

[Objected to by plaintiffs on the ground that there appears to be no delivery of the paper; and also that it was executed by Mr. Lux and then by Mr. Miller by his attorney in fact, Charles Lux, and there appears to be no power of attorney from Miller to Lux.]

Mr. GARBER—I answer that first, that the power of attorney don't apply to Miller. Second, it is good so
2365 far as one of the parties is concerned. Third, I propose to prove the execution hereafter by other evidence, by the other party.

[The objection is overruled and the plaintiffs except.]

[The power of attorney is read in evidence by defendants, and is in the words and figures following:]

"Know all men by these presents, that we Charles Lux and Henry Miller, both of the City and County of San Francisco, State of California, have made, constituted and appointed and by these presents do make, constitute and appoint J. C. Crocker, of Kern
2366 County, State aforesaid, our and each of our true and lawful attorney for us and each of us and in our and each of our names, places and stead to represent us and each of us, and all lands owned by us, or either of us, situate and being within the exterior boundaries of Swamp Land District, No. 116, in Kern County in the State of California, at any and all meetings of property holders of said District, and at any and all meetings of the Board of Commissioners of and for said Swamp Land District, Number 116, and at such meeting to vote for us upon any matter or subject that may be brought up for consideration, and generally to exer-
2367 cise as full control, as we ourselves or either of us, might or could do if personally present.

Giving and granting unto our said attorney full power and authority to do and perform all and every act and thing whatsoever requisite and necessary to be done in and about the premises as fully to all intents and purposes as we might or could do if personally present, and hereby ratifying and confirming all that our said attorney shall lawfully do, or cause to be done by virtue of these presents.

In witness whereof, we have hereunto set our hands

2368 and seals the 22d day of August, A.D. one thousand eight hundred and seventy-six.

CHAS. LUX, [SEAL.]
HENRY MILLER, [SEAL.]
By his attorney in fact, CHAS. LUX.

Witness: James L. King.
[Duly acknowledged.]

Mr. HOUGHTON—I next offer in evidence a certified copy of the articles of incorporation of the Kern River Land and Canal Company, filed July 1st, 1876, from the Secretary of State's office.

2369 The articles of incorporation are read in evidence, and are in the words and figures following, to wit:

State of California, }
Department of State, }
Sacramento, May, 19th, 1875.

I, Drury Melone, Secretary of State of the State of California, do hereby certify that a copy of Articles of Incorporation was filed in this office on the nineteenth day of May, A.D., 1875, containing the following statement of facts:

1. That the name of the corporation is the Kern
2370 River Land and Canal Company.

2. That the purpose for which it is formed is to construct a canal from a point on Kern River, near the Railroad Bridge in Kern County, to Tulare Lake, for irrigating and other purposes; to acquire and sell land, and to raise, buy and sell live stock.

3. That the principal place of its business is in San Francisco, Cal.

4. That the term for which it is to exist is (50) fifty years.

5. That the number of its Directors or Trustees is seven (7), and the names and residences of those who
2371 are to act as Directors or Trustees until the electien of such officers, and their qualifications, are:

W. H. BAXTER.....	Residence	San Francisco,	Cal.
WM. HOLDEN	"	"	"
J. P. Moore.....	"	"	"
O. P. CALLAWAY.....	"	"	"
J. A. ROBINSON.....	"	"	"
CHAS. F. BROWN	"	"	"
E. W. SCOTT	"	"	"

6. That the amount of its Capital Stock is Five Hundred Thousand Dollars ($500,000), and the num-

2372 ber of Shares into which it is divided is Five Thousand (5,000).

Witness my hand and the Great Seal of the State at my office in Sacramento, California, the nineteenth day of May, A.D., 1875.

DRURY MELONE,
[SEAL.] Secretary of State.
By N. E. White,
Deputy.

STATE OF CALIFORNIA,
City and County of San Francisco. } ss.

2373 Jos. Clark, being duly sworn, says that he is Vice President of the Kern River Land and Canal Company; that the foregoing certificate is a true copy of the certificate of the filing of the Articles of Incorporation of said Company, issued by the Secretary of State to said Company, which said certificate is now on file in the office of said Company.

In witness whereof the said Joseph Clark has hereunto set his hand, and has affixed the corporate seal of said Company, this thirtieth day of June, A.D. 1876.

[SEAL]. JOS. CLARK,
Vice President Kern River Land and Canal Company.

2374

STATE OF CALIFORNIA,
City and County of San Francisco, } ss.

On this thirtieth (30th) day of June, in the year one thousand eight hundred and seventy-six, before me, Eugene H. Tharp, a Notary Public in and for the said city and county, duly commissioned and sworn, personally appeared Jos. Clark, known to me to be the Vice-President of the Kern River Land and Canal Company of the corporation that executed the within and annexed instrument, and acknowledged to me that such corporation executed the same.

2375 In witness whereof I have hereunto set my hand and affixed my official seal, the day and year in this certificate first above written.

E. H. THARP,
[SEAL.] Notary Public.

Endorsed: Filed July 1st, 1876.

F. W. CRAIG,
Clerk.

Mr. HOUGHTON—We ask leave to amend our complaint in this case by striking out the words on the lines 1, 2 and 3, on page 6, which are as follows—it is a part

2376 of the prayer of the complaint: "And that the Court will determine and declare the amount of damages done to plaintiffs by the wrongful acts of defendants as aforesaid, and will order, adjudge and decree that the defendants pay the same to the plaintiffs."

We have not put in any proof as to the damages or the amount of damages occasioned, and we do not desire to complicate the matter, and we do not desire to put in any evidence on that point, but simply ask for an injunction in this case.

The COURT—The motion is granted.

Mr. HOUGHTON—We offered in evidence in the early
2377 part of the trial a power of attorney from John Redington to H. P. Livermore. There was some question about the admissibility of that power, on the ground that we had not accounted for the original. I am informed since that the original has been found, and will be here to-morrow morning. Reserving the right to introduce that when it is produced, so that there will be no question as to that, we will close our case.

Mr. GARBER—With that exception, of introducing the original power of attorney?

Mr. HOUGHTON—Yes, sir.

2378 [Here, on motion of counsel for defendants, further hearing of the case is continued until Monday next, at 10 o'clock A.M.]

The foregoing occurred on Thursday, April 28th. On Monday, May 2d, at the opening of court, the following proceedings in the case occurred:

Mr. HOUGHTON—We, the Court will remember, reserved the right to offer in evidence the original power of attorney from John H. Redington to H. P. Livermore, dated May 21st, 1870, and recorded on the 3d day of June, 1870, in Book I of Power of Attorney,
2379 pages 34 and 35.

Mr. GARBER—This, the original, a copy of which was put in?

Mr. HOUGHTON—Yes, sir; we now offer that original. It is already in evidence; that is, a certified copy of it. We desire, if the Court please, to ask Mr. Crocker a single question, which will make one point more clearly appear in the case, if it does not appear now.

Mr. GARBER—Which point is that?

Mr. HOUGHTON—I don't know that it appears how long he was in possession of that land, and using it for grazing purposes.

2380 Mr. GARBER—I object to opening up the case.

Mr. HOUGHTON—I simply desire to ask that one question.

Mr. GARBER—That has already been asked.

Mr. McALLISTER—In looking over the testimony, we don't know that the proof on that point is distinct as to the date. We simply fixed the date that the plaintiffs had been using this land for the purposes of feeding their cattle.

Mr. GARBER—I object to opening up the case.

2381 Mr. McALLISTER—We don't seek to open up the case; simply to ask that one question.

Mr. GARBER—They examined various witnesses on that point. The witness has testified on that particular point.

The COURT—The recollection of the Court is that the witness testified he had been pasturing his cattle there.

Mr. McALLISTER—Your Honor is entirely correct; but he didn't testify the date when he commenced doing so. It is a mere omission on our part.

2382 Mr. GARBER—All right.

The COURT—Proceed.

Mr. Crocker was then recalled, and testified as follows:

JAMES C. CROCKER,

recalled for plaintiffs.

Mr. HOUGHTON. Q—When did you commence pasturing your cattle upon the land described in the amended complaint?

2383 A—In 1870, at the time we bought the land and came in possession of it.

Mr. HOUGHTON—That is all.

The plaintiffs rest.

2384 ***Certificate of Counsel and Judge of Superior Court.***

The foregoing, (consisting of 596 pages) is a portion of the Bill of Exceptions on motion for a new trial and on appeal, being Volume No. 1 of said Bill, which said Bill of Exceptions consists of four volumes, and we hereby agree and certify that the foregoing portion of said Bill of Exceptions is true and correct.

July 28th 1882.

2385 Stuart M. Laughlin

Att'ys for Pl'ffs.

Louis T. Haggin

Att'y for Def't.

The foregoing is one (No. 1) of four volumes comprising the Bill of Exceptions on motion for a new
2386 trial and on appeal, which said Bill is hereby allowed and approved as true and correct.

July 31st, 1882.

B. Brundage

Superior Judge.

Endorsed.

Filed July 31st, 1882.

Service of this volume (2) accepted by copy this 21st day of August, A.D. 1882.

Louis T. Haggin

Attorney for Respondent.